# e Minima Vournal,

# FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1711.—Vol. XXXVIII.

LONDON, SATURDAY, JUNE 6, 1868.

STAMPED .. .SIXPENCE, UNSTAMPED .. FIVEPENCE

M. R. JAMES CROFTS, STOCK AND SHAREBROKER, No. 1, FINCH LANE, CORNHILL.

(Established 1812.)

Holders of mining shares difficult of sale in the open market may find purchasers for the same through Mr. Croffrs' agency. Also parties requiring advice how to act in the disposal or abandonment of doubtful mining stocks may profitably avail of Mr. Croffrs' long experience on the market in all cases of doubt or difficulty, legal or otherwise.

PROSPER UNITED.—These mines have now a parcel of tin (about 13 tons) for sale, and, besides the late improvement in the 60 cross-cut and 50 west, other favourable changes are noted in this week's report. A limited number of shares for sale, at 11s. net.

SPECIAL BUSINESS as SELLER of Waste Challed In the control of the control o

favourable changes are noted in this week's report. A limited number of shares for sale, at 11s. net. SPECIAL BUSINESS as SELLER of West Caradon, East Caradon, Marke Valley. Wheal Trelawny, and East Cara Brea. \*\* FOR ASSOLUTE SALE—100 SortridgeConsols, i.s., and 50 North Robert, 9d. per share, all calls paid. Mr. Chofts advises the purchase of Summer Hill and West Godolphin shares at the present low prices. SPECIAL BUSINESS in both these mines below the market quotations, Bankers: National Bank of Scotland, 37, Nicholas-lane, E.C.

11/8

% 31%

1 11/4

15 16

58. pd.

51/6 6 3/4 1

Bankers: National Bank of Scotland, 37, Nicholas-lane, E.C.

MR. JOHN BUMPUS, 44, THREADNEEDLE STREET,
has FOR SALE the following shares, free of commission:
20 Gt. Retallack, £2½,
50 Chontales, £2.
30 Chontales Royal, £1½,
50 Ender, £2 19s.
20 East Caradon, £3½,
50 E. Rosewarne, 6s. 3d.
50 E. Carn Brea, 14s.
50 Frank Mills, 18s.
50 Frontino, 15s. 6d.

Bumpus, 44, THREADNEEDLE STREET,
20 Gawtones, 18s. 3d.
20 Gt. Retallack, £2½,
20 Gawtones, 11s. 3d.
20 Gastone, 19s. 3d.
20 Gastone, 450,
20 Gas

UIDE TO INVESTORS.—THE STOCK, SHARE, AND FINANCE REGISTER for June contains a comprehensive review of the Stock and Share Markets; a list of all the dividends paid in May; a comparative estimate of the profits of the several descriptions of shares; a selection of Investments paying 10 to 22 per cent.; and information for intending investors.—6d, per copy, or 5s, annually, post free.

Published by Mr. Baker Lelean, at bis offices, 11, Royal Exchange, London.

. W I L L I A M W A R D ,
STOCK AND SHAREDBALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C.

MR. JOHN BATTERS, STOCK AND MINING

MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER, 19, THROGMORTON STREET, LONDON, E.C. Every description of shares BOUGHT and SOLD at the best market prices.

MR. THOMAS SPARGO, STOCK AND SHAREDEALER, 224 & 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

M. J. B. REYNOLDS, 70 and 71, BISHOPSGATE
STREET WITHIN, LONDON, E.C., STOCK AND SHAREDEALER.
Established Eleven Years. Bankers: City Bank.

M ESSRS, POWELL AND MOSS, SHAREDEALERS, 18, OLD BROAD STREET, LONDON, E.C., and Mining Exchange, have large transactions in Prince of Wales, North Treskerby, Frontino, North Crofty, Chiverton, Chiverton Moor, and West Chiverton. Parties dealt with at a fair margin on the market price.

References exchanged.

Bankers: City Bank, Finch Lane.

JOHN RISLEY, (SWORN) STOCK AND SHAREBROKER, 48, THREADNEEDLE STREET, LONDON, E.C. Business transacted in the British Funds, Railway and other Stocks, Foreign Bonds, &c., on the usual commission, 114 per cent. on mining and other shares, above £2; and at £2 and under 6d, per share.

Bankers: London and Westmiuster, Lothbury.

MR. EMANUELLBEADREALER.

3. CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.,
Is a BUYER or SELLER at market prices of the following:—Chontales, Prince
of Wales, Gronville, Seton, Redmoor, New Lovell, Clifford, Chiverton Moor,
Montgomeryshire Lead and Barytes, New Clifford, West Frances, Emily Henrietta, and North Downs.
Information respecting any of the above on application.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN.

M ESSRS. WILSON, WARD, AND CO., STOCK AND SHAREDEALERS, 16, UNION COURT, OLD BROAD STREET, LONDON, E.C. BUYERS of New Great Consols shares.

MR. JAMES HUME, STOCK AND SHAREDEALER,
Transacts BUSINESS in the following mine shares:

Chiverton. Wheal Mary Florence.
Chiverton Moor. East Caradon. Crebor. East Lovell. South Condurrow.
East Grenville, Cook's Kitchen. Great Retallack. Cooper Hill. Bossa Grando.

Grenville. Great Retallack.

Great Retallack.

Copper Hill.

Rossa Grande.

A few of the above are specially recommended for a great rise, the outlay being small. Shares continued for the account, and every phase of business conducted.

Bankers: The London Joint-Stock Bank.

ARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 2, BUCKLERSBURY, LONDON, E.C. a usiness transacted in every description of securities at closest market prices. To decommission.

we recommend the immediate purchase of Lovell Consols, Great South Chiverton, East Chiverton, Great Laxey, and Tamar Valley shares. Particulars and price on application.

Our "Investment Circular and Financial Record," forwarded post free on application.

Bankers: London and Westminster Bank.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER,
No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established
20 years). has FOR SALE at nett prices:—20 Wheal Kitty (St. Agnes), £234;
5 Maes.y-Safn, £234;
100 Camborne Vean, 7s. 9d.;
20 Rose and Chiverton
United; 50 Caidbeck Fells, 12s. 6d.; 40 Prosper United, 10s. 6d.; 150 West St.
Ives; 60 West Prince of Wales, 10s. 6d.; 20 Gonamena, 15s. 9d.; 100 Crebor,
2s. 4d.; 3 Minera; 50 West Tremayne, 7s. 6d.; 70 South Grenville, 2s. 9d.; 50
Okel Tor; 100 Gian Alun; 65 Gwydyr Park, 4s. 6d.; 10 Chiverton Moor, £64;
20 East Grenville, 2s. 9d.; 50 East Garn Brea; 45 Cuddra, 12s. 6d.; 30 South
Herodisfoot, 17s. 9d.; 25 Wheal Grenville, 30s.; 15 North Treskerby, 17s. 6d.;
40 Bryn Gwlog; 2 Wheal Setton, £8s; 50 Colquite and Callington United; 55
Drake Walls; 10 East Lovel; 100 Lovell Consols; 100 Frontino and Bollvia,
15s.; 50 Anglo-Brazillan, 13s. 9d.; 100 Anglo-Italian; 10 Cape Copper.
BUYER to Predeen Consols, Devon Great Consols, South Caradon, Redmoor,
Parties desirous of SELLING shares not usually dealt in on the market may
find purchasers through Mr. Budge.

THE STOCK AND SHARE MARKETS.

The Stock and Share Markets during the last few weeks have shown increased activity, and, during the last few days more especially, have been in a very buoyant state. In addition to a large speculation now going on in all descriptions of stocks and shares, it is also well known that the general public, who have been waiting so long for the lowest point, are now bone fide buyers for investment—hence the great rise which has taken place.

The fine weather, the expectation of a good harvest, the fall in the price of corn recorded weekly the more cheerful feeling, which is now entertained regarding political matters both at home and abroad, cheap money, and the better feeling which prevails respecting the home and foreign trade, all combine to favourably affect the Share Markets, and the effect of their influence on them is only now beginning to be felt.

In the Metal Market there is also more activity, with a brisker demand for copper, tin, and lead, and no doubt before long we shall see an important rise in the price of these articles.

I, therefore, confidently suggest that no time should be lost in making a judicious selection in Cornish Dividend and Progressivo Mines at the present low prices. This it will be my pleasure to point out to all who may entrust me with their confidence and business.

PETER WATSON, STOCK AND SHAREDEALER,

PETER WATSON, STOCK AND SHAREDEALER, 79, OLD BROAD STREET, LONDON.

ORNISH AND DEVON MINES.—
PETER WATSON'S "WEEKLY MINING GIRCULAR AND SHARE LIST—
SYNOPSIS OF CORNISH AND DEVON MIKS." of Friday, June 5, No. 482,
Vol. X., price 6d. each copy, forwarded on application, contains information on the following mines:—
Wheal Trelawny.
West Great Work,
North Wheal Grofty,
East Wheal Seton.
East Wheal Seton.
East Wheal Lovell.
With Statistical Information respecting Tin, Copper, and Lead.

INVESTMENT OR SPECULATION.—A SELECTED LIST OF RAILWAYS, BANKS, MINES, COLONIAL SECURITIES, FOREIGN GOVERNMENT BONDS, &c., forwarded to bona fide investors on application, in addition to the high rate of interest many of the above are paying, there is now every probability of a great rise in market value.

PETER WATSON, STOCK AND SHAREDEALER,

79, OLD BROAD STREET, LONDON
(three doors only from Hereules-passage, entrance to the Stock Exchange).

Twenty-three years' experience.

(Two in Cornwall and Twenty-one in London.)

Bankers: The Alliance Bank, and the Union Bank of London.

References given and required (when necessary) in all the principal towns of the United Kingdom.

M R. E D W A R D C O O K E,
FOREIGN AND BRITISH MINING SHAREDEALER,
76, O L D BROAD STREET, LONDON, E.C.
Is a BUYER or SELLER of Don Pedro, Pestarena, Port Phillip, Rossa
Grande, Anglo-Brazilian, St. John del Rey, Frontino, and Chontales, at
market prices. Orders in same, either by delegram or post, will have prompt
attention.

My remarks on a few mines will be found on page 407.
Satisfactory references given in any town in the United Kingdom.
Bankers: Alliance Bank.
A daily list of prices sent free on application.

W. H. C U E (late of the firm of WATSON and CUELL), Has REMOVED TO 42, CORNHILL, LONDON, E.C.

MATTHEW GREENE, STOCK AND SHAREDEALER, 1, ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
The shares in the following mines are worth buying at the present prices:—
Tamar Silver-Lead, Montgomeryshire Lead and Barytes, New Clifford.
Full particulars of the above on application.

INTENDING INVESTORS.—The "FINANCIAL GAZETTE. NTENDING INVESTORS.—THE "FINANCIAL GAZETIE,"
1 published by Mr. Y. CHRISTIAN, should be consulted with a VIEW to
the SAFE EMPLOYMENT of CAPITAL. It contains Original Articles, a Review of the Money Markets, and a selection of investments paying 10 to 17 per
cent., and such information as is necessary to guide intending investors.
6, Bond-court, Mansion House, London, E.C.
Baukers: Bank of England.

JAMES H. COCK, STOCK AND MINING SHAREDEALER,
61, OLD BROAD STREET, LONDON, E.C.
Fifteen years practical experience in Cornwall and London.
SPECIAL BUSINESS in South Caradon, New Lovell, Chiverton Valley, Caldbeck Fells, and West Drake Walls.

M. R. T. ROSEWARNE, 81, OLD BROAD STREET,
LONDON, E.C.
T. ROSEWARNE, having returned from his tour of inspection through Devon
and Cornwall, is enabled to advise parties what mining shares they should buy

T. R. has SPECIA Bedford Consols. Bedford United.

d Cornwall, is enabled to advise passes sell.

T. R. has SPECIAL BUSINESS in the following shares: Bedford Consols.

Bedford Consols.

Bedford United.

Great North Downs.

Notherton.

West Chiverton.

Chiverton Moor.

Devon Consols.

Prince of Wales.

East Lovell.

East Carn Brea.

Frontino and Bolivla.

We Chontales. res:—
Anglo-Brazilian.
North Downs.
Princess of Wales.
Wheal Seton.
Gawton.
Gonamena.
West Maria and For-Bedford United. Chontales. Chiverton Moor. Devon Consols. East Lovell. East Carn Brea. Marke Valley. Chontales. tescue. Rossa Grande. es which are safe for a great rise within the next

Rask Calley.

Rossa Grander

I can recommend three mines which are safe for a great three months.

Money lent to any extent upon good mining shares.

Bankers: Bank of England.

Office hours 10 to 4.

JOHN WILLIAM HUTCHINSON
has FOR SALE at act prices, for cash or account:—
50 Chontales, £118s. 25 E. Grenville, 35s. 3d. 15 So. Condurrow, 7s. 9d
10 Cargoli. 25 Gt. Retallack. £2 5 3 25 Wh. Grenville, 31s. 6d
50 Drake Walls, 8s. 9d. 15 No. Crofty, £2 0s. 6d. 50 West Godolphin (offer
15 Don Pedro, £2 17s 9d 50 P. of Wales, £2 1s. 9d wanted).
20 Rossa Grande, 18s 9d
WANTED TO PURCHASE, sellers state number and lowest price cash:—
Seton, Trelawny, Kitty (St. Agnes), Gonamena, Clifford, and North Treskerby.
Investors and speculators are invited to consult the above for a safe selection in mining and other stocks.

OFFICES,—31, THROGMORTON STREET, LONDON, E.C. HUTCHINSON count:— 15 So. Condurrow, 7s. 9d 25 Wh. Grenville, 31s. 6d 50 West Godolphin (offer wanted).

MR G. D. SANDY, STOCK AND SHARE DEALER,
No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS
BUSINESS IN EVERY DESCRIPTION OF STOCK EXCHANGE SECURITIES,
MINING and FINANCIAL ENTERPHISES, at close market prices,
Correct Daily Price List can be had on application.
Money advanced to any amount on legitimate stocks and shares.
References exchanged.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE

Mining, Railway, and other Shares bought, sold, or exchanged. Shares for alle in mines and quarries that will pay 15 to 20 per cent. per annum. Offices, 6, Finsbury-street, London, E.C.

INVESTMENT, LOAN, AND BANK AGENCY.

INVESTMENT, LOAN, AND BANK AGENCY.

INVESTMENTS in PUBLIC SECURITIES may be effected by payments at intervals to suit the convenience of the Buyer, upon advantageous terms.

LOANS granted, for one year or any shorter period, and renewable, if required, on Stocks and Shares having a market value.

FIVE PER CENT. INTEREST allowed upon DEPOSITS of all amounts withdrawable at one month's notice.

The Finance Agency of Foreign Governments, Municipalities, Public Companies, and Money Agency Business generally undertaken.

Terms of business forwarded, post free, on application.

RICHARD TAYLOR AND COMPANY.

No. 12, Clement's-lane, Lombard-street, London, E.C.

M R. C H A R L E S T H O M A S, MINING AGENT, GENERAL SHAKEDEALER, AND AUCTIONEER, 3, GREAT ST. HELEN'S, LONDON, E.C.

Third Edition, price One Shilling; post-free, fourteen stamps MINING FIELDS OF THE WEST:

A PRACTICAL EXPOSITION OF THE
PRINCIPAL MINES and MINING DISTRICTS OF CORNWALL and DEVON.
Published by CHARLES THOMAS,
At No. 3, Great St. Helen's, London, E.C.

MESSRS, LANE AND GIBBS, 2, ROYAL EXCHANGE, LONDON, E.C. (Members of the Mining Exchange), STOCK AN SHAREDEALERS, transact business in all kinds of securities at closest new

IAREDEALERS, transact business in an analysis of cash or account.

SPECIAL BUSINESS in East Caradon, Snaefell, Great Laxey, and Minera ares, for cash, or the fortnightly settlement.

Daily price list on application.

Bankers: London and County Bank.

No. 44, THREADNEEDLE STREET, LONDON, E.C. References Exchanged.—Member of the Mining Exchange.

Bankers: London Joint-Stock Bank.

TRUMPET CONSOLS (TIN) MINE,—
WANTED TO PURCHASE, SHARES in this PROPERTY. Sellers will
please state number and lowest price for each to—

GRANVILLE SHARP AND CO., SHAREBROKERS, 32, POULTRY, LONDON, E.C.

SAFE PROFITABLE INVESTMENTS.
Dividends, 10 to 20 per cent. per annum on outlay.
INVESTORS, SHAREHOLDERS, CAPITALISTS tecking reliable information and safe investments, should read SHARP'S INVESTMENT CIRCULAR (post free). GRANVILLE SHARP AND CO., SHAREDEALERS, 32, POULTRY, LONDON, E.C.

R. EDWARD BREWIS, PALMERSTON BUILDINGS, 34, OLD BROAD STREET, LONDON, E.C., has for sale free of commission, for cash or account: -20 Chontales, £175; 40 Frontino; 15 Summer Hill; 10 Chiverton Valley, £4½; 1 West Chiverton, £61½; 5 Great Rhosesmor, £5; 100 Gian Alun, 6s. 9d.; 5 Maes-y-Safn, £26; 1 Clifford, 5½; 20 North Teskerby, 16s. 9d.; 30 Don Pedro, £2½; 10 Lucy Phillips, £1½; 25 St. Vincent, £2; 40 Prosper United; 5 East Lovell, £8; 15 Rossa Grande, 19s.; 10 Westminster; 10 Boverly Wagon Company, £14 paid; 60 Caldbeck Fells, 12s. 6d.; 100 West St. Iyes; 50 West Kitty; 150 Snaefell, 10s. 3d.; 20 Rose and Chiverton, £3; 10 St. John del Rey, £18½; 20 Prince of Wales, 41s. 9d.; 5 Mount Pleasant, £3; 25 South Darren, £1½; 20 Crobor, 2s. 6d.

MR. THOMAS THOMPSON, MINING OFFICES,

M. R. E. J. BARTLETT, STOCK AND SHAREDEALER, AND FIXANCIAL AGENT, No. 30, GREAT ST. HELEN'S, LONDON, E.C., has SPECIAL BUSINESS, as a BUYER or SELLER of SHARES, in West Godolphin, Uny, Don Pedro, Summer Hill, Minera, and East Caradon.

\*\* Buyers or sellers of West Godolphin and Summer Hill shares should address the above for information, &c.

Established Fourteen Years.

MR. R. TREDINNICK,
CONSULTING MINING ENGINEER,
CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.

MR. J. N. MAUGHAN, STOCK AND SHAREBROKER (Member of the Stock Exchange),
No. 2, COLLINGWOOD STREET, NEWCASTLE-ON-TYNE,
Transacts business in Railways, Funds, and overy description of Mines.
Bankers: Messrs. Lambton and Co.

ESSRS. BEORAND KENRICK,
MINERAL ESTATES OFFICE,
EXCHANGE BUILDINGS, BIRMINGHAM; WANSEA, SOUTH WALES; AND RUABON, NORTH WALES

TO CAPITALISTS AND PROPRIETORS OF MINERAL PROPERTY. B, and K, have now on their LIST, FOR DISPOSAL, COAL AND METAL.

LIFEROUS MINES, at HOME and ABROAD, or ACTIVE PARTNERSHIPS
therein. Owners of works and mineral leases, wanting to develope the same, are
solicited to apply to the above. References given.

CHONTALES GOLD COMPANY.—FULL PARTICULARS of the DIFFERENT CLASSES of SHARES can be obtained on application to Mr. J. H. MURCHISON, No. 8, Austinfriars, E.C.

JAMES SCOTT AND CO., STOCK AND SHAREDEALERS,

1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.

J. S. and Co. are SELLERS, for cash or the account, of shares havy of the undermentioned mines, at quoted prices, nett:—

Bedford Consols, 17s. 6d.
Carl Brea, £20.
Carl Brea, £20.
Chiverton Moor, £6 12s. 6
Chiverton Moor, £6 12s. 6
Chiverton Valley, £4 10s.
Chiverton Valley, £4 10s.
Chiverton Valley, £4 10s.
Port Phillip, £4 15s.
Corl Brea, £2.
Chiverton Valley, £4 10s.
Port Phillip, £1 12s. 6d.
East Caradon, £4.
East Lovell, £8.
Frouthor, 18s.
Corl Brea, £2.
Corl Brea, £3.
Corl Brea, £3.
Corl Brea, £3.
Corl Brea, £4.

espectable references.
J. S. and Co. having in their employ several of the most experienced and trustworthy mine agents in the United Kingdom, who periodically inspect on their
whalf all the bona fide mines in Devon, Cornwall, and Wates, are enable to acord to their friends and clients reliable advice as to the present and future propects of mines they deem worthy the attention of investors,
References will be given to the Alliance Bank and the Bank of England.

ESTABLISHED 1847.

#### STATHAM AND COMPANY, н.

MANUFACTURERS OF EVERY DESCRIPTION OF INDIA RUBBER AND GUTTA PERCHA VALVES, &c., WASHERS, BUFFERS, HOSE PIPES, TUBING,
STEAM PACKING, BELTING,
BLASTING TUBE FOR NITRO-GLYCERINE POWDER.

AIR AND WATER PROOF ARTICLES.

To proprietors of mines, quarries, mills, railway and steamboat companies, and all large consumers, most advantageous terms are offered. ANY ARTICLE MADE TO SKETCH OR PATTERN.
PRICE LISTS AND SAMPLES ON APPLICATION,

11, CORPORATION STREET, MANCHESTER; IRWELL WORKS, SALFORD.

#### DYNAMITE, OR NOBEL'S PATENT SAFETY BLASTING POWDER, May now be had from

MESSRS. WEBB AND CO., CARNARVON,

Sole consignees from the patentee. This powerful BLASTING AGENT will not explode from a spark, or concussion alone, but requires the combined effect of both, and is fired by a strong percussion cap and ordinary fuse. In a compressed state it may be fired in damp holes, or under water.

holes, or under water.
Force, SEVEN TIMES that of the BEST GUNPOWDER.
It will shiver to pieces cast or wrought-iron, or the toughest teak timber. No tamping is required. It is by far the safest explosive for blasting purposes ever discovered.

#### NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.

THE EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard ruck, in sinking shafts, driving tunnels, and opening forward in close ends is immense. It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton.

Being heavier than water it sinks to the bottom of a wet hole, no other tampton than water being removed.

Being heavier than water it sinks to the bottom of a wet noie, no other eamping than water heing required.

One charge of this blasting oil, which is now being used with wonderfuleffect
in all the largest slate quarries in North Wales, will displace as much slate rock
as four or five charges of gunpowder; and its great force, acting on a large
quantity of good slate rock, shakes and displaces it at the natural joints, or
cracks, without damaging the slabs nearly so much as the more numerous
blasts from any other blasting material would do.

This invaluable quarrying agent may now be obtained from Messrs. Webb
and Co., Carnarvon, sole consignces from the patentee.

#### PEACOCK AND BUCHAN'S COMPOSITIONS.

Nos. 1 and 2 for SHIPS' BOTTOMS; 3 and 4 for RAILWAY AND MINING PLANT, &c.

FROM P. J. MARGERY, ESQ., C.E., ENGINEER OF THE SOUTH DEVON RAIL—
WAY COMPANY.

South Devon Railway Engineer's Office, Dawlish, Sept. 23, 1865.

I have extensively used Messrs, Peacock and Buchan's No. 3 paint or composition, on the viaducts and bridges of the South Devon Railway, and I consider it to be a paint of very good qualities, and that two coats of it are equal to three of other paints; also that its durability is greater.

(Signed) P. J. MARGERY, Engineer S.D.R., M.I.C.E.

N.B.—The South Devon Railway Company have continued to use it, and are now painting their stations with it.—February, 1868.

EXTRACT OF A LETTER FROM EDWARD WOODS, ESQ., C.E.

EXTRACT OF A LETTER FROM EDWARD WOODS, ESQ., C.E.
3, Storey Gate, Westminster.

DEAR SIR,—Please prepare 6 cwts. of your composition for preserving timber, put up in strong wooden casks, to go round the Horn for the Copiapo Railway

Edward Company.

Believe me, yours truly,

Capt. George Peacock.

(Signed)

EDWARD WOODS. ompany. Capt. George Peacock.

For price, &c., apply to -PEACOCK AND BUCHAN, SOUTHAMPTON.

TO THE PROPRIETORS OF FIRE BRICK, STONEWARE PIPE, AND TILE WORKS; ALSO, OF ARTIFICIAL MANURE, PATENT FUEL AND SUGAR WORKS, &c., &c.

CARR'S PATENT DISINTEGRATOR,

CARR'S PATENT DISINTEGRATOR,
For REDUCING to a FINE GRANULAR POWDER various UNFIBROUS
MATERIALS (whether HARD or SOFT) at the rate of from TEN to THIRTY
TONS AN HOUR, according to the size and strength of the one used, and the
amount of power available to drive it.
This unique and efficient mill, unparalleled for novelty, wholesale execution,
and dispatch, is rapidly superseding throughout the United Kingdom and
abroad all other pulverlsing machines at the above-named and other works, at
an immense improvement to their manufacture in quality and quantity, and at
a saving in steam-power and labour, in some individual cases amounting to
several hundreds of pounds a-year.
An illustrated pamplet, fully describing the disintegrator, with woodcuts and
prices (which range from £50 to £140), together with the names and addresses
of some two hundred of its purchasers (some of whom have taken two, three,
or even four of them), will be forwarded at any time, free of charge, on application to the patentee, as below, who will also send, by sample post where specially required, samples of powdered materials in the precise state as they were
pulverlsed by various disintegrators, consisting of fire-clays, ganister, shale,
heavy hurnt stoneware, coal, pitch, &c., and likewise the names of some of the
purchasers who have kindly consented to show theirs in operation to bona fide
enquirers.

purchasers who have kindly consented to enquirers.

THOMAS CARR, PATENTEE, MONTPELIER, BRISTOL.

WILTON'S MATHEMATICAL INSTRUMENT ESTABLISHMENT REMOVED from St. Day to A. JEFFERY'S, CAMBORNE.

W. H. WILTON begs to thank his friends for their very liberal support for so many years, and informs them that he has now declined business in England in favour solely of Mr. A. JEFFERY, MATHEMATICAL INSTRUMENT MAKER, CAMBORNE, whom he considers (having been an assistant to his father for several years) is in every way capable of creditably maintaining the good name universally awarded to Wilton's instruments.

#### A. JEFFERY

Respectfully begs to inform Mine Managers, Surveyors, Engineers, &c., that having purchased Mr. Wilton's business, and the very valuable acquisitions and appliances belonging thereto, he has enlarged this Mathematical Instrument Manufactory, and is prepared to supply TheonoLites, Dials, Pocket Dials, Levels, Traversing and Plain Phothactors, Cases of Drawing Instruments. Readering Chairs and Plain Phothactors, Cases of Drawing Instruments. State Counters, and, in short, every description of Instruments used in Surveying, Measuring, Mapping, &c.

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#### Oniginal Connespondence.

#### INSPECTION OF MINES.

INSPECTION OF MINES.

SIR,—Parliament has already laid down certain fixed rules to be observed at every colliery both by the master and the workmen. Is it not, therefore, a slur upon the intelligence of the workmen to ask Government to appoint additional Inspectors to do what both parties should do for themselves? The collier sees wages rise and fall with the inexorable rule of supply and demand, and thus silently submits to Free Trade. He knows if he strikes he must strike with a rising market if he hopes for success, and he manfully fights for a share of the profits if the master will not give it otherwise, and it is all right that it should be so—Why can he not do the same to get compliance with the common law of the land—the Mines Inspection Act? If those verdant Members of Parliament who wish the Government to appoint additional Inspectors to protect the miner were only to think of this they would see that every man should be his own Inspector—(I do not speak of the leaders, for they have other motives)—and that to increase the number of Inspectors would be to make them either detectives, which would be odious, or managers, which would be impossible. If the men do their duty there is no need for additional Inspectors—indeed, for that matter, it might be argued there is no need for Inspectors at all. Is the ventilation defective? The miner must know it sooner than anyone else; all he has to do is to point it out to the ventur. It show early himselse denargange. miner must know it sooner than anyone else; all he has to do is to point it out to the master. Is there anything else dangerous?—any breach of the statute? All he has to do, again, is to point out the defect, and, if the master fail to attend to his complaint, it is surely

as legitimate a cause for a strike as wages is.

As I stated before—Is it not a slur upon the intelligence of the mining community that Government needs to interfere to obtain for them that obedience to the common law of the land which other trades get for themselves? Just suppose that, in these days of Free Trade and liberty, Parliament appointed a Government Inspector of smiths, a Government Inspector of masons, of joiners, of tailors—and why not as well as miners? and yet it has not entered into the imagination of Common Parliaments and when the support of the common parliaments and the support of the support o

not as well as miners? and yet it has not entered into the imagination of George Potter to ask such a thing.

Let the miners bestir themselves, and think on the matter. They are the only adults who ask Government to send men to do for them what they should do for themselves. As for the leaders of the men—those who address the miners as friends of fellow-workmen—they are mere catspaws of the masters. Perhaps they know it, perhaps they do not; but it is pitiful seeing them running about the country "fuffing," calling on the men to Strike! strike!! strike!!! and magnifying themselves and their position. Why, any outsider can see that they are playing the masters' game. The masters are anxious that the men should strike. If the men only stood for about two months then we would have got rid of the surplus stocks—wages would rise, and so would prices follow; and the masters are reducing, reducing, hoping that the men will strike. "You coalmasters," said one of them, "should raise a monument to me." "We wadna' grudge ye that if ye wad keep quait below it," was the reply. Like other members of their tribe, most of the leaders are very probably unconscious that they occasionally do the very work the masters want; but they are uncontrollable, and go as far the other way, and wages rise far higher than they would have done but for the interference of the leaders. Let the men think for themselvs and now listen of again—lower than they would have done but for the interference of the leaders. Let the men think for themselves, and not listen to demagogues, who go spouting about the mining districts and in London. Neither the masters nor workmen can rule prices; they can neither prevent the prices going down in a falling market, nor pre-vent wages rising in a rising one. London, June 3.

#### ACCIDENTS IN COAL MINES.

SIR,—Although Mr. Greene, the Member for Bury St. Edmund's, does not represent a coal district, nor is in any way interested in mines and mining, I certainly think every credit is due to him for bringing before the House of Commons the very important subject of accidents in collieries, and in asking the Home Secretary what were the intentions of Government with respect to the report of the Select Committee on Coal Mines. On the other hand, the reply of Mr. Hardy was not quite so clear and satisfactory as could have been desired, whilst his statement that "dividing mines into compartments must be the work of legislation," and which was warmly received, appears to have been made without considering its practicability. Perhaps one of the most important matters to which the attention of the Committee had been directed was the appointment of additional Inspectors, and in alluding to which Mr. Greene justly, as I think, complained that the inspection as at present was no inspection at all. The term Inspector is, undoubtedly, a misnomer, for the gentlemen who fill that office deem it no part of their duty to visit collieries with a view to the prevention of accidents, although after a fatality has occurred they visit the scene of it with a view to ascertain the cause. That such is the case will be apparent from the evidence given by Mr. Dickinson as to the nature of an Inspector's office. He says— SIR,-Although Mr. Greene, the Member for Bury St. Edmund's, He says

"The Inspectors do not feel it their duty to visit mines without being summoned in consequence of some accident, or from any complaint, and that they do not go into a mine without a special reason, such as the character of the manager, or the receipt of information leading to suspicion; and that in going further they would be doing a positive mischief, and that you would do more good by repealing the Inspection Act altogether, and leaving the managers responsible as before."

According to the above interpretation, Inspectors were not appointed for the purpose of inspecting mines, but more for seeing that the Acts of Parliament for their regulation were carried out, and then only when they were informed of any infringement of them. According to the views of Mr. Greene, and a great many other persons, there is no doubt the office of Inspector was created for the purpose of affording additional safety to the miner, and with the view as far as possible to prevent accidents. Indeed, had there been anything like real inspection—according to the ordinary meaning of the word—it is the opinion of many persons well acquainted with the Oaks and Talke collieries that the fearful loss of life which occurred at those places almost simultaneously would have been averted. But Oaks and Talke collieries that the fearful loss of life which occurred at those places almost simultaneously would have been averted. But the Yorkshire Inspector admitted that he had not been down the Oaks Colliery for five years before the accident. Indeed, his visits could not be frequent to any colliery, seeing that he had no less than 420 under his charge. It has been urged that to inspect mines frequently would have the effect of shifting the responsibility from the owners and viewers. But, as the Committee state, the Inspectors have never exercised nor claimed the right of giving directions, so that the objection has but little force. Further, I agree with the resolution come to by the committee. "That the present staff of Inspectors should be jection has but little force. Further, I agree with the resolution come to by the committee, "That the present staff of Inspectors should be increased, with a view to more frequent inspection, but it is also desirable that men of a lower standard than those at present selected should not be employed in the discharge of this important duty." In other words, that no sub-Inspector should be appointed, a view which I believe will give satisfaction to all persons connected with collieries, as it is desirable that the Government officials should be of such professional standing as would ensure the confidence of work

en as well as owners.

In his first speech Mr. Greene alluded to the necessity for under In his first speech Mr. Greene alluded to the necessity for underviewers, stewards, &c., undergoing an examination for the purpose of testing their fitness for their situations. The committee, however, in reporting on that branch of the enquiry, considered that "no examination would afford so good a test of a man's fitness to be employed in any such capacity as the professional knowledge which the owner or manager has, or at least may be expected to have, of the character and qualities of those whom he employs." This reason I do not believe to be tenable; and, if necessary, instances to prove that men were frequently employed as underground stewards who were not practically qualified for the situation could be adduced from almost every district in the kingdom. Referring to the same subject, a genevery district in the kingdom. Referring to the same subject, a gen-tleman of acknowledged ability and experience, and who is as well qualified as any person in the country to speak on the point (Mr. C. Morton, late a Government Inspector) reports as follows:—

"During many years of experience as Government Inspector I have ascertained that some of the lamentable misfortunes referred to were purely accidental; others were distinctly attributable to the incompetence or negligence of persons having control over the mines; not a few were assuredly owing to the thoughtlessnessor wilfulness of the operatives themselves; and a large majority

of these sorrowful events could clearly be traced to either the agents' or the work-men's ignorance of, or inattention to, judicious maxims, rules, and regulations."

men's ignorance of, or inattention to judicious maxims, rules, and regulations."

After such a statement, from so high an authority, it would almost appear of great and grave importance that some means should be devised for testing the practical more than the scientific knowledge of persons holding the situation of managers, stewards, &c.

With regard to the statement of Mr. Hardy as to the necessity of legislating for the purpose of having the mines divided into compartments, and in respect to which the Committee state that—

"It is expedient to provide that it shall not be lawful to employ more than 100 persons in any mine, unless such mine be divided into separate districts or panels, in such manner as that each such separate district or panel shall have one more independent intake and return alrewy to the main return or upeast. That in mines so divided not more than 100 persons shall be employed in any separate district," &c.

That such could be done in the laying out of new collieries there is

parate district," &c.

That such could be done in the laying out of new collieries there is very little doubt, but I cannot see how it can affect in any way the collieries at present being worked, many of which have their workings miles in extent. Another important consideration is also the question of cost, which would be so very largely increased in dividing a colliery into compartments. However, the whole subject is now ripe for legislating upon, and it is to be regretted that the present session should have been allowed to pass away without the report of the Committee leading to the carrying of some measure for securing increased safety to those working in mines.

R. J. increased safety to those working in mines.

#### MATHER'S PATENT WASHING-UP BUDDLES.

SIR,—Referring to my letter of last week, the buddle therein men-tioned is for washing or cleaning fell or hutch work. The superi-prity of this machine over the old mode is that when the stuff is put into it it whirls around with such rapidity that the different bodies get so separated and cleaned that "lucing" is completely unnecessary; the jigging is much freer, which makes the stuff easier to clean,

sary; the jigging is much freer, which makes the stuff easier to clean, and of a better quality.

The other washing-up buddle is to take the stuff directly it is drawn out of the mine (the large rocks excepted), and is much upon the same principle, except being larger in diameter, longer and stronger accordingly, with 3 ft. of it perforated with inch holes for the fell to drop through into an iron trough, and taken direct to the jigger, whilst the rough drops on a platform, or picking-table, there separated by children, the refuse being raked into a kind of funnel, which conveys it into a wagon below, which can be worked by the same machinery (or a lad), whilst the ore is raked into another funnel, or funnels, direct to the crusher—infact, the saving of manual labour is so enormous as to be almost beyond calculation. The jigger and crusher will be brought forward in a short time. The principle, upon the whole, when carried out will completely revolutionise the whole system of dressing and cleaning ore of every description. R. N.

#### SUBTERRANEAN TEMPERATURE.

SIR,—I have frequently read the communications in the *Mining Journal* with reference to the internal temperature of the Earth, but the evidence brought forward hitherto seems to me to be of a most unsatisfactory character. Even in the address of Prof. Warington Smyth (published in the *Mining Journal* of May 23) we see that the decrease is by no means constant, and that there is almost equal justification for concluding that the increase of temperature is 1° Fahr. in 56 ft., or in 78 ft., or in 117 ft.; and I cannot understand why it should be argued that there is necessarily any increase at all, except under peculiar and isolated circumstances. We are at least justified in believing that the alleged increase of temperature is not permanent under peculiar and isolated circumstances. We are at least justified in believing that the alleged increase of temperature is not permanent and unvarying—it is not like the variation of the barometer at different elevations, or we should be enabled to calculate the depth of a pit by the temperature indicated by the thermometer; and if this be admitted, our most careful calculations, except for known depths, must be useless, or even worse than useless, for the supposed knowledge may lead us astray, and prevent our utilising many of the subterranean products which Nature has provided for our use. Enquiries into the internal temperature of the Earth as they have at present been conducted are so many records of the carelessness of the geologists and physiciats who have conducted them, and the conclusions

into the internal temperature of the Earth as they have at present been conducted are so many records of the carelessness of the geologists and physicists who have conducted them, and the conclusions based upon them are, therefore, unreliable.

There is nothing whatever to lead us to suppose the existence of internal fire, and the fallacies upon which that erroneous supposition was based become more evident the more we consider them. What sound geologist now recognises igneous rocks, or even recognised them before Sir W. Logan's last discovery in connection with ancient fossils? It had before been proved that from the very nature of quartz it could not have been produced in the presence of fire; and as we invariably find quartz in the lowest rocks we have yet reached, surely it will be admitted that they also are not igneous. The increase of temperature, then, if any, must be traced to some other source than internal fire. For my own part, I do not believe even in great internal heat, although I admit that it might be like those matches which "ignite only on the box," and exhibit itself only when in contact with the external air, for I believe that if there were any internal heat—and by this I mean heat originating in the centre of the Earth—it would radiate more equally, and render the existence of the frigid zones impossible. Now, would it not be better to assume that the heat is derived from the Sun, and after penetrating a certain distance can go no further, whilst the outside is kept cooler by the movement of the Earth in revolving on its own axis and around the Sun? This would give a hot zone at some distance from the surface, but would not compel us to assume internal fire.

But whether there be internal fire or not, it appears to me that by

not compel us to assume internal fire.

But whether there be internal fire or not, it appears to me that by far too little attention has been paid to the nature of the rock in which the recorded temperature was found, for it may be ascertained which the recorded temperature was found, for it may be ascertained that at (say) 3000 ft. granite is much warmer than coal, or coal than granite; and thence it might be concluded that each rock in its original place in the earth has a characteristic temperature, and that where there are variations in the temperature of the same rock it is due to the proximity of some other or warmer rock. Of course, the accuracy or the inaccuracy of such a theory can only be determined when we have much more knowledge than at present; but I think it will be acknowledged that there are many ways for accounting for increase of temperature at the small depths we have already reached, without resorting either to the theory of internal fire or to that of without resorting either to the theory of internal fire or to that of permanently increasing temperature.

H. F. R.

#### ON SCIENTIFIC LAW AS BEARING ON THE IMPROVEMENT OF SUBMARINE TELEGRAPHY.

SIR,—Kepler, one of the greatest geniuses the world ever saw, spent 22 years of an active life in finding a rule to tell the distances at which the planets revolved round the sun. Knowing the times they took in revolving—that is to say their years—he squared the cube roots of those times, which gave a series of numbers bearing to one another the same relation as the distances of which he was in search, but the rule did not give the periodic time of the moon's revolution but the rule did not give the periodic time of the moon's revolution round the earth, although the analogy between the two cases is complete; nor did it afford the least intimation why it was applicable to one of the cases and not to the other. The fact is that the rule is empirical, pointing to no principle in physics by which the operation of cause could be traced. It will be instructive to contrast with this another law on the same subject, and equally correct, which I have deduced in about the same number of minutes from the recognised deduced in about the same number of minutes from the recognised principles of physical science. If any of your readers will take the trouble to multiply the square roots of the planets' distances from the sun by the distances themselves respectively, they will have a series of numbers bearing to each other the same proportion as the planets' years bear to one another. Compare, for example, the two planets nearest the sun, taking the distance of Mercury at 37,000,000, and that of Venus at 69,000,000 of miles; those numbers multiplied each into its own square root 6082′7 × 37=225,059·9, and 8306′6 × 69=573,155·4. And as the product for Mercury is to 87'969 of cur days for its year, so is the product for Venus to its year of 224'028 of our days, showing a discrepancy of a fraction of a single day, and even that would disappear if the distances were calculated more closely than to a whole million of miles. This rule for finding the years of the planets, which, so far as I know, is new, will no more apply than Kepler's to the analogous case of the moon's revolution round the earth, but because it is a physical law, it points out the reason why it should apply in the one case and not in the other; for the sun, as a centre of gravitation, is the same to all the planets, whereas its mass with respect to them has not the same relation that the earth's mass has to the moon, and this difference by Newton's law

is a full explanation.

is a full explanation.

I cite these cases to illustrate that every law which is put forward for applying physical science to the purposes of art should be deduced from mechanical principles; and even when such is the case, a law immediately ceases to be a safe guide if it be extended to any principle not involved in its construction. This is the condition of the laws long since put forth by Ohm for the guidance of electro-telegraphy; and which, from a narrow basis of truth, are now extended. graphy; and which, from a narrow basis of truth, are now extended under the unwarrantable prestige of his name to cases so new to electrical science as never to have been thought of in his time. As electrical science as never to have been thought of in his time. As a student of physical law in general, and of electrical law in particular, for more than half a century, it has fallen to my lot to initiate improvement practically and theoretically. It will, perhaps, be recollected by you, Sir, that on one occasion I undertook to introduce a sanitary measure which, in 20 years, has become exclusively adopted in almost every large town in Europe, though, at the onset, I was asked by those whom it has since most benefited to leave them as they were. I am powers in the same spirit by the professional they were. I am now again met in the same spirit by the professional engineers, who are satisfied with things as they are in electro-telegraphy, the existing evils of which the public are far less able to estimate. The question, however, which ought to be discussed needs only common sense to deprive it of all technicality. Every schoolboy knows how much longer it takes to charge a Leyden jar than a simple conductors, and telegraph engineers already admit that their ple conductor; and telegraph engineers already admit that their cables are long Leyden jars, needing to be charged at a great expen-diture of time between every two consecutive signals, of which, be it remembered, five, on an average, go to a word. They admit also that a conducting wire would answer the same purpose, and take only a small fraction of the present time, provided only the Leyden charge could be suppressed. Those who have practical knowledge of electricity as a science will not venture to deny that each cable may be furnished with an outside Leyden coating, nor, that while its outer coating is insulated, and kept constantly charged, its inner coating that its care, its conducting wire—whether prefetly necessitive. —that is to say, its conducting wire—must be perfectly unsusceptible of charge, and, therefore, incapable of wasting time by its ingress and egress. Now, all this being so, there is no reason to be assigned why egress. Now, all this being so, there is no reason to be assigned why signals might not be sent and received through a properly constructed cable, however long, in vast numbers, limited only by the human powers of manipulation. Why, then, is not the improvement made? It will be made when the public wake up to see the position of the question; and, in the meantime, at least for the next few weeks, there will be ample to reward the first enterprising capitalist who shall move in the matter.

RICHARD LAMING, M.R.C.S. Gloucester-place, Brighton, June 3.

#### AFFAIRS ON THE RIVER PLATE.

AFFAIRS ON THE RIVER PLATE.

SIR,—It is again necessary to reply to Mr. Child on the subject of the War in Paraguay. He objects to my using the expression "administration of Francia," because the Doctor was a despot. This is a little hypercritical, as that person was placed in power by the will of the people as a constitutional President. He abused his power, and adopted a foreign policy, which Mr. Child has properly called "Japanese," a policy, however, forced upon him by that pursued towards his country by Brazil and Buenes Ayres. To this day Francia is named by the people with respect. I again deny that either the elder or junior Lopez pursued the policy of their predecessor; they have been invariably the friends of free trade, and of political liberty. They have clucated the people, countenanced religious liberty, promoted commerce and agriculture, maintained peace with neighbouring States for a great number of years, and so governed the country as to make the Paraguayans the happiest people, probably, on the face of the country as to make the Paraguayans the happiest people, probably, on the face of the country into an estate of his own, for which he is fightling, has as tome achieved the country into an estate of his own, for which he is fightling, has not toward the country into an estate of his own, for which he is fightling, has been sifted, and found wanting. There are not more than half a dozen Englishmen in the lines, and they are with at most two exceptions, medical men—the exceptions are civil engineers. They are all under contract, and none of them expressed to Mr. Gould, when sent up from Buenos Ayres, any desire to leave the country. It is not true that any Englishmen have fallon in the service of Paraguay, nor that the persons sent away are the widows and children of those who perished under forcible detention, or in the military service at all. Mr. Child refers to the Government Biue Book as confirming his views. No more worthless publication was ever issued from the Foreign Office; and the B

tion or boundaries. It is a war by Paraguay against Brazilian interference with the domestic affairs of the Spanish Republics, from which her own independence is in danger.

Mr. Child represents the imports, exports, mining, metallurgy, and, in fact, all production and commerce as carried on for the interest of Lopez. No misrepresentation was ever more groundless or absurd. It is enough for me simply to deny it; I am not called upon to prove a negative—the onus probandi rests with the gentleman who affirms a thing so far beyond belief. He says that the Liberals of the country are expatriated. There are from 50 to 70 Paraguayans at Buenos Ayres who have "left their country for their country's good;" they are no more political extles than English refugees at Bologne and elsewhere, who have strong reasons for going abroad, and have the same for remaining there. Mr. Child declares that Flores had the support of nearly the whole of the native and foreign population of the Banda Oriental. Why, then, was he driven out of it? Why was it necessary for Brazilian fleets, troops, and subsidies to aid him in coming back? Why did even his abettors, including his via sons, repeatedly revolt against him, and ultimately slay him? Three-Gourths of the people of the Oriental State are in favour of peace with Paraguay, and are hostile to Brazil.

My opponent affirms that Paraguay at first favoured the United States ex-

courts of the people of the Oriental State are in favour of peace with Paraguay, and are hostile to Brazil.

My opponent affirms that Paraguay at first favoured the United States expedition, and then opposed it. It was never opposed by Paraguay. Mr. Child has not replied to any portion of my statements on this head, which are true as they are complete. He represents Brazil as at first opposing the expedition because it was made by a ship-of-war, but upon a better understanding of the object making proper concession. Can anyone in his senses believe that the Brazilian Government did not learn through its minister at Washington all about the intentions of the United States Government long before the Water Witch salled? But the tone adopted both at Washington and Rio by the Brazilian diplomatists was prevaricating, deceptive, and obstructive.

My opponent claims for Brazil the confidence of your readers as to her love of free navigation in her own waters, on the ground that, having opened the Amazon, she would not close La Plata. The gentleman really does not know what Brazil has done upon the Amazon. She never even pretended to open it until driven to make the pretence to cover her purposes in this war, and save appearances in Europe and the United States. It was not until Dec. 7, 1866, that a decree was published opening the Amazon, but all its affluents were kept placed, the opening of which constituted the real question of free navigation in bose waters. The Amazon proper was then opened to the Peruvian frontier. The Jocatins, which flows even from Matto Grosso, was only opened to Cometa, a few miles from the Junction of the two rivers. The noble Madeira, running from the Andes, is only open to Borlea, not many miles from the junction. The Tapajox rises in the Damond regions, but is only open to Santarem, which is usually considered to be on the Amazon itself. By the Rio Negro communication is practicable to Veneznela, but it is only open to Manaos. The San Francisco, which flows into the Adaatoit, is open onl

Sin.—I have read with great interest the controversy in your Journal between Dr. Nolan and Mr. Child concerning the war in Paraguay, and its causes and consequences. I entirely concur with the opinions and statements expressed by Dr. Nolan, and having resided for many years at Assuncion, the capital of Paraguay, I ought to know, and do know, its history and its condition. I

should not trouble you with this communication but for the astounding fiction in Mr. Child's letter, that the liberal Paraguayans are exiled by the tyranny of the President. There are no exiled liberals from that country, either in Europe or the United States. Every Paraguayan absent from his country may return with safety and honour, unless he has offended in such a way against the ordinary laws of his country as would prevent an Englishman in like circumstances from returning to England. I enclose my card, and subscribe myself as—London, June 3.

ONE WHO HAS LIVED LONG IN SOUTH AMERICA.

#### ON THE WASTE OF MINERAL AND OTHER NATURAL PRODUCTS.

-Resuming the subject of waste matters, I beg to offer a few remarks upon auriferous and argentiferous slimes and tailings. To these important matters I called the attention of your readers some two or three months ago, and then showed that from the Comstock lode of Neyada *alone* several millions of dollars worth are annually lost through the inefficient methods of reduction there employed. As this loss may be regarded as a type of what is constantly going on in our own large gold and silver mining companies, where thousands of tons of ore are subject to like operations, it will readily be seen what a different and improved aspect might be represented upon the periodical balance-sheets, were only 10s. or 15s. per ton rescued from a waste which results after all the expenses of raising and imperfect reduction have been incurred.

reduction have been incurred.

As the slimes and tailings are generally allowed to run off toge ther into the same waste-pits, or other receptacles, and then spoken of and assayed under the general term of tailings, the condition in which the bulk of the loss occurs is generally unknown, and as it is almost invariably much greater in one than the other, it becomes of almost invariably much greater in one than the other, it becomes of the utmost importance that they should be retained, or got rid of in separate channels. In cases where the matrix consists of quartz, containing sulphides, but free from calcareous or aluminous matter, the bulk of the loss will be found in the tailings. These should be concentrated by levigation, to double or treble the assay value of the original ore, before being subjected to further treatment, while the quantity of slimes will be found exceedingly small, and the quality too poor to pay for further operation, unless the gold exists in a very minute state of subdivision, which can readily be determined by assay. On the other hand, when the precious metals are contained in slate, aluminous schist, calcareous rock, or clayey matter (as in the great blue gravel deposit of California), and no considerable amount of sulphides present, by far the largest amount of loss will be in the of sulphides present, by far the largest amount of loss will be in the slimes, the proportion in the tailings being very minute. As the ratio of slimes to tailings rarely exceeds one of the former to four of the latter, by permitting both to run into the same reservoir the valuable slimes become diluted in this proportion by the worthless tailings, the assay indicating that the mixture will not pay the expenses of a second treatment.

An instance of this is afforded by the Comstock lode. Here the An instance of this is afforded by the Comstock lode. Here the slime contains 3 or 4 per cent, of carbonate or sulphate of lime, with a little alumina; this usually yields a much higher percentage than the bulk of the ore—say, \$40 and upwards, according to the grade of ore operated on, while the tailings seldom show higher than \$15 per ton. A rigid analysis of an average sample of the ore will always suggest to an intelligent operator whether he is to look for his loss in the slimes or tailings, or both, and enable him to make such ar-rangements for the recovery of this portion of the metals that no unnecessary labour or expense may be incurred; assays of the bulk of the separate portions obtained will, of course, confirm or correct his ideas on the matter.

The treatment of heavy tailings, either in bulk or after concentra-

tion by roasting, chlorinising, re-amalgamation, or smelting, is already so well understood by all competent metallurgists, it is unneces-sary for me to add anything further on this branch of the subject; sary for me to add anything further on this branch of the subject; but with regard to slimes, their treatment or reduction as a profitable commercial undertaking is one that has, up to the present time, baffled the skill of chemists and metallurgists, both in Europe and America. The chief and great difficulty to be overcome is the very light and minute state of the particles, and their tendency to float off the surface, thereby escaping contact with the heavy mercury, with which no amount of agitation in barrels, pans, patios, or other systems of amalgamation can secure contact sufficient to ensure perfect amalgamatical engages are according to the security of the scale of the surface of

amalgamation can secure contact sufficient to ensure perfect amalgamation, or even an approximation to it, the result being that, while considerable progress has already been made in the successful treatment of tailings, the slimes are allowed to run to waste; and most operators who have attempted their reduction, and thus obtaining a profitable result, have given up in despair.

On my return from Nevada, last year, I brought with me a sufficient quantity of slimes, as well as tailings, to enable me to test them in any new machines I might meet with in England; but after having placed myself in communication with some of the first makers and inventors of such apparatus, I could not meet with anything that would accomplish this more important object until a few weeks ago. would accomplish this more important object until a few weeks ago, when I met with a gentleman, who made a professional engagement with me to test a machine he had invented for the special purpose of treating auriferous slimes. The result of our experiments showed that this machine recovered (under every disadvantage) 62 per cent. of the assay value of the bullion contained, while not more than 17 per cent. could be obtained from the same class of slimes which had been operated on at the Gould and Curry Mill, by my late friend, Mr. Cornelius Hill, with what was considered the most efficient machinery hitherto known. When this important discovery has been protected by the necessary netons its marks will be fully placed before the hitherto known. When this important discovery has been protected by the necessary patents its merits will be fully placed before the public, and afford parties interested an opportunity of testing its capabilities. On a prima facia view it will prove of enormous value to those companies operating on large quantities of poor gold and silver ores, such as the Chontales, St. John del Rey, &c.

W. T. RICKARD, F.C.S.

Assay Office, 2, Crown Chambers, Threadneedle-street, June 3.

#### RAILWAYS, AND RAILWAY DIRECTORS.

SIR,—The efficiency of all boards of directors of public companies is of paramount importance, and is necessary in the case of railways, as in every other description of commercial and public undertakings, in order to command and ensure success. In the administration of railway affairs active boards should be secured, and these should be awarded adequate remuneration for their services. The grave question to be established is, how can a "directory" be rendered effective without affording scope and facilities for abuses of power? The remuneration cannot be based on the nett earnings of ordinary shareholders, for that would conduce to the heavy issues of preference and debenture priorities, which must be regarded simply as mortgages on the properties, shifting the entire responsibilities and risks upon the original holders, and so long as the undertakings remain of value enough, associating no hazard with the holders of preference and debenture stocks. So soon, however, as the line of demarcation is passed—that is to say, so soon as the margin at present existing betwixt revenue and costs of working and maintenance be absorbed—so soon will the total annihilation of ordinary stock and shares take place. The twelve principal lines in England increased their capital -The efficiency of all boards of directors of public companies place. The twelve principal lines in England increased their capital from 225,258,695l. to 340,513,682l. in four years, just over  $12\frac{1}{2}$  per cent. annually, from Jan. 1, 1863, to Jan. 1, 1867. During the whole period in question the gross revenue of the aggregate companies was fully 20 per cent. less than the money called up. In the year 1862 the revenue amounted to 20,731,098/., against 28,910,560/. for the year ending Dec. 31, 1866. To secure this additional revenue of 8,179,462/. an expenditure of called up capital of 115,254,987% was required, in addition to the increased indebtedness of the several companies at this moment, besides the heavy expenses of Chancery proceedings, and the discomforture and loss attending the conduct of such gigantic undertakings as the Great Eastern, London, Chatham, and Dover, London and Brighton, with others, whilst clogged and retarded by legal obstacles and all the conflicting elements attendant thereon.

Ordinary shareholders are the real proprietors of railways, deben-ture and preference holders are simply mortgagees; hence the former are directly interested in restricting the growth of the latter, and are more immediately concerned in the appointment and constitution of sound and efficient executives. Original proprietors have nothing to gain, and from the aspect of railway affairs at present most unquesgain, and from the aspect of railway affairs at present most unques-tionably everything to lose, in adding to the amount of debenture and preference stocks; therefore, we suggest that they should introduce an element into railway finance which should in future prohibit and interdict such adverse transcription of their rights in the properties themselves, otherwise the day is not far distant when in more than one case we believe that original shareholders will find themselves in the same position as the owner of a landed estate valued at 50,000*l.*, with a first mortgage of 30,000*l.*, a second of 20,000*l.*, and a third of 10,000*l.* upon it, receiving a rent of 3 per cent. on his capital, and paying his mortgagees 5 per cent.: thus, in the sequel, losing 1500t. per annum in order to support a false position—the difference betwixt revenue and expenditure. The nominal holder of the estate, as the

revenue and expenditure. The nominal holder of the estate, as the original holder of ordinary shares, will soon find himself minus his lands, as the latter will of his railways.

The directors should be paid for their services, and they should be rendered responsible for the consequences of issuing reports showing fictitious gains. A Government audit should become established, and sufficiently stringent in its workings to act as an ample and complete affecting the algebrate any response to the displacement of the consequence of the consequ sufficiently stringent in its workings to act as an ample and complete safeguard, so as to suppress at all times the slightest approach to radical misrepresentations, and effectively to extinguish over any lengthy period the cooking of accounts, or the unfair administration of the funds at their disposal. The costs of working, compared with revenue, should be carefully defined; the expenses of maintenance kept apart from those of construction of new lines and new stations, and capital account kept distinct, and clearly established. The fiscal losses incurred in raising money for the renewal of debentures and loans should be stated in the compilation of half-yearly accounts, and most unquestionably charged to revenue and not to capital expenditure. Lastly, directors should be the agents and not the masters of the shareholders, and the latter should render it imperative on their executives to contract expenses, and, if possible, found their interest upon the discouragement of profitless extensions, pointless waste of upon the discouragement of profitless extensions, pointless waste of revenue, objectless competition with adjacent lines, and the applica-tion of the power vested in them to further the interests of the com-

panies under their control, instead of advancing, as is too often the case, their own and that of their friends who rely upon their support. What a lamentable position for a great property like the Great Western Railway to stand in! The dividend on ordinary stock in 1862 was 1½ per cent., when the capital was 28,734,680%, and for the year closing Dec. 31, 1866, it was reduced to 1½ per cent., and the capital increased to 51,278,070%—viz., capital called up in four years 22,513,20% capable 7.5% here each annually. Although 22,543,390., equal to 78½ per cent, or 19½ per cent annually. Although this heavy expenditure has increased the revenue greatly, it has acted doubtlessly very adversely to the interests of ordinary shareholders, doubtlessly very adversely to the interests of ordinary shareholders, and should as soon as possible be closed; still we are pleased to record that the financial troubles of this company are now apparently at an end. The panic found the company committed to a heavy capital outlay, with many debts, and with large sums raised on terminable debentures falling due. The effects of the crisis remained, and bankers demanded their money, while debenture holders refused to renew, the consequence being that capital account was practically stopped, and a struggle commenced to keep the company's head above to renew, the consequence being that capital account was practically stopped, and a struggle commenced to keep the company's head above water. The Court of Chancery, as usual, filled in the background of the picture. A commission of enquiry was appointed, which resulted in demonstrating the good faith of the board. The proprietors then began to feel increased confidence in their administrators, and, as the event has shown, the expression is not one of mere words, but has been as active and combined on the part of shareholders as the directors could have wished. The financial difficulties, as we before observed, seem to be practically at an end, and a rise of upwards of 10 per cent, in the price of the ordinary stock indicates returning confidence on the part of the public, but at 54%, the quotation of the day, the interest received is only about 3 per cent.; but this advance is solely attributable to the announcement of the Chairman at a recent meeting that their future policy would be to convert floating liabimeeting that their future policy would be to convert floating liabi-lities into fixed stock, and he called upon the shareholders to aid their endeavours. The directors of the Great Eastern, London and Brighton, London, Chatham, and Dover, and other involved lines complain bit-terly of that want of systematic support on the part of shareholders which has enabled the Great Western to retrieve its position. Let us hope, however, that the successful example now exhibited of the good effects of combined action in the case referred to will induce the vascilating proprietaries of other lines to work in harmony in future for the common good. In that event we may shortly be enabled to hail with pleasure a speck on the horizon denoting prospective reform and healthy progress.

\*\*London\*, June 3.\*\*

\*\*Consulting Engineer.\*\*

#### CORNISH MINES, AND THEIR TITLES.

SIR,—The necessity for an Office of Registry, either in Cornwall or London, of mining properties and mineral rights is admitted and ac-knowledged by all associated with the mining interests. If such had existed no such wrong could have been committed as practised by Mr. Paul Rabey, nor could so many obstacles intervene betwixt the ven-dors of mining setts and the investing public in ascertaining and dedors of mining setts and the investing putter in ascertaining and determining the rights of parties concocting and promoting companies. The license or grant is a wretched title, and wholly one sided. The "lord" grants not unfrequently to parties possessing neither the means or intellect to form a company of shareholders sufficiently powerful to develope and prove the value of the lodes; nor do they expect the grantee to carry out the work, but, on the contrary, he expects his nominee to go to London and get others, from his exaggerated and wisioners records of inaginary wealth, to give a premium for the visionary reports of imaginary wealth, to give a premium for the "lease," which he can obtain from the landlord so soon as a good and responsible list of shareholders is produced to his satisfaction; but occasionally even this is not forthcoming until the works are com-menced; then the proprietor of the land is certain of his prey. The poor entrapped adventurers are wholly at his mercy; all the expendi-ture must be lost unless the lease is taken upon the landlord's terms; ture must be lost unless the lease is taken upon the landlord's terms; these usually increase in intensity in accordance with the requirements and commitments of the promoters, and the difficulties they will have to encounter in case of the landlord's refusal to grant. Under these or the like circumstances, 80% to 100%, per acre is a moderate charge for land destroyed, worth about 15% in the market to realise, or 10s. to 12s. 6d. per annum to let. Next, the royalty must be 1-15th instead of 1-24th or 1-30th. An increased number of men must become the minimum employed, and not unfrequently coals or other supplies must be purchased during the "lease" from this or that merchant, closely allied by family or other ties to the landlord. It is not entirely to point out these grievances that I now address

that merchant, closely allied by family or other ties to the landlord.

It is not entirely to point out these grievances that I now address you, but more to refer to the case of the Wheal Charlotte Mine, in St. Agnes, with which I was lately enlisted as a promoter to establish a public company. A gentleman from Porth Towan addressed me in April last year upon the subject of working this mine, and I agreed to find parties to subscribe 1000% to defray the preliminary expenses of advertising, and otherwise constituting and floating an efficient and powerful company to unwater the old works, and to open up sections of parallel with deeper levels on the old, and partially worked, lodes that formerly yielded such large returns and profits, but it was understood, and distinctly stated, that no expenses whatever were to be incurred at the mines, or in connection with the same, otherwise be incurred at the mines, or in connection with the same, otherwise than in taking up the grants, and thus establishing a title. The gentleman referred to was to obtain the deeds, and 100% towards the expenses, and I the 1000l. as subsequent promotion money, but under no circumstances would I commit myself to a sale of shares until the title was completed. The lords were represented to be as follows:—the Earl of Falmouth, Sir Wm. Williams, Bart., Anthony Williams,

Esq., J. F. Basset, Esq., and four others holding smaller interests.

Now, Mr. Editor, would you believe it possible in these days of commercial enlightenment that the landlords, or their stupid agents, could not agree amongst themselves, and that it was not until the lapse of many months, and under the advantageous circumstances above referred to, that the gentleman of Porth Towan succeeded in obtaining any title whatever? First, Mr. Anthony Williams gave a grant for six months, next Sir William Williams, Bart., then Mr. John F. Basset, and, lastly, Lord Falmouth's agent wrote stating that his If. Basset, and, lastly, Lord Falmouth's agent wrote stating that his lordship would grant a licence, but it was never obtained. The remaining four "lords of the soil" would not grant until the works were commenced, and thus not even the imperfect title of an imperfect six months tack-note was ever completed. Yet these landlords were incessantly asking when these works were to be commenced, and who were the shareholders! Under these circumstances, having no title, I declined to proceed, and gave up all idea of involving my friends in difficulties undefined as to the future, and certain only as to subscribing 1000l. for preliminary expenses in the formation of a company that could not otherwise than prove beneficial to the landords and working classes of Cornwall, whilst it remained involved in doubt and obscurity as to success or profits to themselves. I need scarcely add that the gentleman of Porth Towan was non est when his 1002, bill became due, and the whole loss—printing, offices, &c., were borne by me. It was too much for a Cornishman to pay 1002, towards the costs of forming a company, even when rendered abortive through his own inability to assign the grants. He would have been content for his London promoter to entangle himself in preliminary difficulties, and though premature action have involved himself in a dilemma only second to that of Mr. Paul Rabey, through selling that which was promised but never possessed. I have further to remark that I shall in future—and I strongly advise all others similarly situated, in London and elsewhere, to act likewise—never attempt to form a company until the lease is first obtained, and purged of every objectionable clause, subject to a greatly reduced royalty, (say) 1-30th to 1-40th, up to 1-50th, and especially the latter whenever destroyed land is paid for. The small profits yielded to adventurers from Cornish mines is now the slightest of all our home industries; and the time has arrived when the landlords should not only become liberal in granting, but also afford every facility to the enterprising, who in granting, but also afford every facility to the enterprising, who devote their time and energies to the development of mineral grants; whilst probably the day is not far distant when, instead of difficulties and obstacles in the way of promoters, they, instead of paying pre-miums for imperfect titles, will require recompense for services and outlay from the landlords of Cornwall, in endeavouring to constitute companies to work their mines possessing inherent merits too feeble to command local capital and support, and becoming of real value only when foreign capital is applied to their development. R. TREDINNICK,

#### Consulting Engineer. ST. JOHN DEL REY MINE.

ST. JOHN DEL REY MINE.

SIR,—In the face of the fluctuations which almost daily occur in the price of these shares, indicative of market operations of a peculiar kind, I think it would be very satisfactory if the directors would convene a general meeting, or in some other way give a full and frank explanation as to our prospects for the future, and the steps that are being taken towards resuming the works interrupted by the fire. I confess to a sanguine opinion of this mine. I was not previously a shareholder, but could not refrain from buying a few shares when I observed that their fall in price represented a depreciation in the market value of the property approaching half a million sterling, whereas it was reported that estimates made on the spot, and confirmed by the highest authorities here, showed that the cept of slaking two new shafts to the old workings, through the solid ground, would only be from 30,000 to 33,000 t, and these shafts, when finished, would be much more commodious than the old approaches. There is surely sufficient margin here to encourage an investment, even if there were any necessity to sink these new shafts. But I do not believe there exists any such necessity to sink these mew shafts. But I do not believe there exists any such necessity to sink these new shafts. But I do not believe there exists any such necessity to sink these new shafts. But I do not believe there exists any such necessity to sink these new shafts. But I do not believe there exists any such necessity to sink these now shafts is a second chance of fire by being saturated with some of the fire-resisting solutions. It is much to be regretted that the value of this fine property should be so much depreciated, and shareholders frightened into parting with their shares, when, apparently, there is no occasion for alarm. I observed a short time since that one of your correspondents, who takes the gloomy view of the question, mentioned that most of the loss incurred in gold mining was due to the perseverance with worn-out

#### GOLD MINING COMPANIES-MARKET ANOMALIES.

GOLD MINING COMPANIES—MARKET ANOMALIES,

Sin,—Ignorant to a degree—perhaps inexcusably so—of those mysterious
transactions familiarly known to most of your readers as "market operations."
I have for some time past endeavoured by common-sense reasoning to deduce
something like a satisfactory conclusion as to the immediate or prospective reason of the enormous disparities in the negociable value of shares in the leading
gold mines now before the public. Common-sense, however, has utterly falled
to clear away the mist from my untutored vision, and, therefore, I am compelled
to appeal to some "market man." for an explanation of that which is to me inexplicable. By way of better illustrating my case, I will, in the first place,
adduce the annexed comparisons:— No. of shares.

Aggregate

ce the annexed comparisons :-	No. of shares.	market value
St. John del Rey	11,000	£220,000
Don Pedro	76,162	228,486
Pestarena	68,000	162,000
Port Phillip		150,000
Chontales		
Anglo-Brazilian	100,000	75,000 37,000
Frontino and Bolivia	100,000	

Frontino and Bolivia 50,000 37,000
Rossa Grando 100,000 100,000 100,000
Now, what does this comparison show? That the St. John del Rey is selling for nearly as much as Don Pedro, although, unfortunately, the former mine, under the most favourable circumstances, cannot possibly be brought into a profitable position for many years to come, while the latter is yielding a monthly profit of between 300t. and 400t. It also shows that Rossa Grande is selling for 100,000t., although it is perfectly well known that something like two years of expenditure and time must clapse before any permanently satisfactory results can be realised; while the Pestarena Isselling for noncrethan 162,000t. In addition, the testimony of the manager "that it will become the most profitable gold mine in the world." It further shows that Frontino is selling for 25,000t. less than Anglo-Brazilian, which certainly is not accounted for either by the position or prospects of the respective mines.

If any of your readers could point out the cause of these anomalles, a great favour would be conferred not only upon myself but also upon many others similarly situated.—Jine 3.

#### FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.

FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD

MINING COMPANY.

SIR,—A letter which appeared in the Journal of May 23, signed "An Original Shareholder," stated "It is admitted on all hands that the quantity of mineral contained in the company's property is practically illimitable, and, therefore, as the number of stamping-mills is gradually increased, the monthly returns cannot fail to be proportionately augmented, and progressive profits realised. Information to this effect has come to my knowledge from a most reliable source in New Granada, and it is but due to my co-harcholders that they should be informed there are substantial reasons for believing that there yet may be a prosperous future for the Frontino and Boilvia Company." This appeared May 23, and on June 1 we received a circular letter from the directors, embracing several extracts from the advices of Mr. Rouch, the superintendent, which contained information entirely corroborative of that previously communicated by "An Original Shareholder."

Now, I do not for one moment suppose that such information has not been regarded by all bona fide shareholders with much satisfaction, as indicative of the results that may yet be achieved by this, which "An Original Shareholder" has, not inaptly designated, "chequered enterprise;" but, seeing that from the time "An Original Shareholder"s" letter appeared the shares have continued to steadily advance in market value, I do think that all shareholders, whether original or otherwise, should be placed upon the same footing. Unless it can be shown that "An Original Shareholder" botanied his information from private sources, I hold that the general body of proprietors have just grounds of complant, inasmuch as many must have parted with their interest at a fearful discount, just as, it would appear, the long-looked-for corner has been turned, and at least some reward is about to be returned to those who have supplied the capital for the development of the mines.

Another point adverted to by "An Original Shareholder" is

#### SOUTH FOWEY CONSOLS.

SOUTH FOWEY CONSOLS.

SIR,—This mine, situated in Tywardreath, Cornwall, immediately adjoins the southern side of Fowey Consols, of which, I believe, it was formerly a part. The position of the property should command for it a high reputation as a first-class speculation, for all metallic mines must, to a certain extent, be so called until the veins are developed; but if ever any mine undeveloped deserved to be regarded as good this does, and that for the following reasons:—1. The adjoining mine, Fowey Connols, was worked successfully, the company having gained by the working 193,0007.; Par Consols, on the west, has yielded a profit of 220,0007.; Pembroke Mine, a little further westward, gave 129,0007, profit; and Old Crinlis, adjoining Pembroke, gave 189,0007, profit.—2. In driving a cross-cut after the southern side of the set the company have intersected so less than 12 copper lodes, in a rock analogous to that of the rich mines named above. The

direction and character of the lodes are also similar .-- 3. Another lode, on the northern side of the sett, when worked by the Fowey Consols Company, yielded direction and character of the lodes are also similar.—3. Another lode, on the northern side of the sett, when worked by the Fowey Consols Company, yielded large quantities of copper ore.—4. In almost every case the lodes in the group named have proved productive.—5. The granite range is within a mile of the mine.—6. The port of Par, where ores, &c., are shipped, is very near, so that the carriage of the minenals to, and of supplies from, the wharves is very cheap.—7. The conduct of the mine is in good hands, Capt. Puckey, the intelligent manager of Par Consols, being the manager, and Mr. Polkinghorne, of Woodlands, Par Station, the purser. The company is a very respectable one, including the Rev. Dr. Treffry, Mr. W. West, Mr. C. B. Willyams, &c.—8. The mine is to be drained cheaply by a water-wheel, now being erected, there being ample water for all purposes. There are so many circumstances in favour of the mine that I look forward with confidence to successful results.—June 3. R. S.

#### Meetings of Public Companies.

CENTRAL AMERICAN ASSOCIATION (Linear Ed.).
The second annual general meeting of shareholders of the Central American Association (Limited) was held on Friday, May 29, at the American Association Chanteely was need on Friday, may 29, at the offices of the company, 4, Westminster-chambers, "for the purpose of receiving a report and balance-sheet from the directors, and confirming the same or otherwise, and for the purpose of declaring a dividend, and of electing directors and an auditor for the ensuing year, and of fixing the remuneration of the directors and auditor."

Capt. Bedford PIM, R.N. (the Chairman), presided.

The notice convening the meeting and the report and balance-sheet

and of fixing the remuneration of the directors and andier?"

Capt. Bedford Pim, R.N. (the Chairman), presided.

The notice convening the meeting and the report and balance-sheet were read.

The report stated that the directors, in issuing their second annual report to the shareholders, believed that they might, with justice, congratulate them upon the present position and four the property of the present position and four his property. On the occasion of the confidence in the value of the Javail Mine, could only speak of future prospects, on the considence in the value of the Javail Mine, could only speak of future prospects. They had now, however, the satisfaction of announcing solid results, and of inviting the shareholders to dispose of an ample profit. The directors, with the sanction of the shareholders in general meeting, had concluded a contract for the sale of the Javail Mine, with the lands adjoiting, and all plant and machinery, for 65,000, sterling. This amount, after paying off all sums standing to bursed by the company in the investigation of properties in Nicaraga, besides writing off all establishment expenses of every kind in England, enabled a clear balance of 12,8711,128. II.d. to be carried to the credit of the profit and loss account. The board proposed to write off at once the entire amount of the company's preliminary expenses, so as to have a nett balance of 10,714,68,27d. disposable by the charcholders as profit. Out of this sum the directors recommended forward to the next account. The shareholders had, in general meeting, passed the necessary resolutions to enable the directors to take steps for the reduction of the necessary resolutions to enable the directors to take steps for the reduction of the company's shares from £4, 101, and for the return to the shareholders and capital account, of 12, per share out of the lit, its, already paid by them; and the solicitors of the company were now organed in conducting the formal profit the technique of the company shares from £4, and the pro

The general balance-sheet, made up to April 30, showed the following items:

	Authorised issue 30,000 shares		
	Less shares unallotted 4,000 , = 26,000 shares		
	Less also shares forfeited 505 , = 25,495 shares	0.81	
	The sale bank made of the same than the sale bank and the sale bank made of the sale bank and the sale	, or	r.
	which calls have been made of 30s. per share £38,242 10 0		
	Less calls in arrear	0	0
	Amount received on shares now forfeited 307	10	0
	Debenture creditors£14.950 0 0		
	Accrued interest thereon to date 118 6 3= 15,068	0	3
	Bills payable, maturing 4,578		
	Gradien an annual second		
	Creditors on open account	9	9
	Balance profit £12,871 12 11		
	Less preliminary expenses account pro-		
	posed to be written off	6	2
		_	_
	Total£68,401	10	4
R	-By Javali Company (Limited), viz. :-		
400	1. Instalments of purchase-money not yet due £50,000 0 0		
	2. Balance of current account		11
	2. Balance of current account 4,250 9 11 £54,250	9	11
	Advance on mortgage of the Tucuyo Estate, with interest \ 4,394	5	2
	to date		
	Bayano Estate-1. Amount of purchase-money £5000 0 0		
	2. Cost of developing to date. 3600 0 0 8,600	0	0
	Owners of Monte Mayor Mine 165		
	Furniture account	0	0
	Cash in hand—1. At bankers £636 11 4		-
	2. In office	4	2

Total   \$\mathref{\pi}\$68,401 10 4   \$\mathref{\pi}\$68,401 10 4   \$\mathref{\pi}\$68,001 10 10   \$\mathref{\pi}\$68,001 10   \$\m	,, 2. In omce	650	4	8
National Company (Limited), being the amount receivable on sale of the Javali Mine and lands   \$2,550,000			-	4
of office furniture, and other disbursements \$2,000 to Commission on debentures \$2,636 7 5 \$2,636 7 5 \$3 \$2,636 7 5 \$3 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4 \$4		, 1868 :-	-	
Commission on debentures	of office furniture, and other disbursements			-
Interest account	Commission on debentures	359	13	1
Mines and Estates account, including purchase-moneys of the Javali Mine and sums paid in connection with San Miguel Mine, and development of Javali Mine, and general expenses in Central America  Balance profit  Total  Total  Total  Balance profit  Total  Total  Balance profit  Total  Total  Se8,531  Ge5,000  By nett proceeds of sales of gold  Se5,000  A5524  Se5,254  Se7,000  A5524  Se7,000  A5524  Se7,000  By nett proceeds of sales of gold  Se7,000  Se7,000  Se7,000  Se7,000  Se7,000  Mines and lands  Se7,000	Interest account	2,636	7	5
the Javail Mine and sums paid in connection with San   50,037 0 1   Miguel Mine, and development of Javail Mine, and general expenses in Central America   12,871 12 11   11   12   12   13   14   14   15   15   15   15   15   15	Salaries	1,673	4	4
Balance profit	the Javali Mine and sums paid in connection with San Miguel Mine, and development of Javali Mine, and general expenses in Central America			
R.—By Javali Company (Limited), being the amount receivable on sale of the Javali Mine and lands	Balance profit	12,871	12	11
on sale of the Javali Mine and lands			9	6
on sale of the Javail Mine and lands £65,000 0 0 By nett proceeds of sales of gold. 3,54 3 0 Fees on transfers	R By Javali Company (Limited), being the amount receivable			
By nett proceeds of sales of gold	on sale of the Javali Mine and lands	£65,000	0	0
Fees on transfers 7 6 6	By nett proceeds of sales of gold	3,524	3	0
	Fees on transfers	7	6	6

The CHAIRMAN moved, and Mr. A. A. POLLOCK seconded, the first The CHAIRMAN invited, that are A.A. row laid before the meeting, be and are hereby received and adopted," which was carried unanimously. The CHAIRMAN then moved, and Mr. A. A. Pollock seconded, the second resolution, "That a dividend of 5s. per share, free of income tax, be declared or the shares of the company, to be payable on and after June 1," which was carried unanimously.

Total ......£68,531 9

the shares of the company, to be payable on and after June 1," which was carried unanimously.

Mr. Freewer moved the third resolution, "That Capt. Pim be and is hereby re-elected a director."—Mr. Freewer said that he had great pleasure in proposing that their zealous and far-seeing Chairman be re-elected a director, and he might, perhaps, be allowed to add his own congratulations as well as those of the shareholders that a "tardy act of justice" had at last been done by the Government in making their Chairman a post captain. Everyone must regret that promotion was so long delayed, when it ought to have been conferred upon him years ago, not only for his gallantry and bravery in the Chinese and Russian wars, but for his great services in the Polar region when he rescued the crew of the Investigator from starvation and death.—The resolution, which was seconded by Mr. A. A. POLLOCK, was carried unanimously.

Mr. A. A. POLLOCK then moved the fourth resolution, "That Dr. Berthold Seemann be and is hereby elected a director of the company."—Mr. POLLOCK said he knew he was depriving the Chairman of a great pleasure in proposing this resolution. Dr. Seemann and Capt. Pim, during their famous voyage around

the world of H.M.S. Herald, and cruizes to the Arctic regions, had shared many dangers and hardships together, and obtained on these and other occasions that practical acquaintance with almost every part of the known globe that now rendered their views and opinions so valuable. When he (Mr. Pollock) and the Chairman first concelved the idea of forming the Central American Association, Dr. Seemann consented to go at once to America and see what properties and prospects might offer themselves, the engagement being that if no company should be formed the travelling expenses and a mere nominal salary should be paid to him. Their reliance on his judgment had not been disappointed. They owed to him the acquisition of the Javail Mine and Bayano Estate, and they would never have touched the Tucuyo property if its owners had not produced as their credentials a report which Dr. Seemann wrote after examining it.

Mr. SALMON, in seconding the resolution, said that he and all his colleagues had the greatest confidence in Dr. Seemann's judgment, which was shown in an eminent degree when, acting on his own responsibility, he acquired that gem of Chontales, the Javail Mine. This resolution was carried unanimously.

Mr. HARDING moved, and Mr. FREWER seconded, the fifth resolution, "That the sum of 1000. be appropriated by the directors for their remuneration for the last two years," which was carried unanimously.

The CHAIRMAN moved, and Mr. A. A. POLLOCK seconded, the sixth resolution, "That the sum of 101. 10s. for each year's audit of the accounts of the company be voted as remuneration to the auditor of the company," which was carried unanimously.

Mr. A. A. POLLOCK moved, and Mr. SALMON seconded, the seventh resolution, "Mr. A. A. POLLOCK seventh resolution.

"That the sum of 101. 10s. for each year's audit of the accounts of the company be voted as remuneration to the auditor of the company," which was carried unanimously.

Mr. A. A. POLLOCK moved, and Mr. Salmon seconded, the seventh resolution, "That Mr. Edward Harding be elected an auditor of the company for the ensuing year." —Mr. POLLOCK stated that Mr. M'Arthur, their former auditor who had performed his duty most satisfactorily, was entering a wider field of usefulness, and it was, therefore, necessary to fill up the vacancy. Mr. Harding had been for years at the head of a large and successful firm in India, and was a most competent person for the office, —The resolution was carried unanimously.

Mr. HARDING, on accepting the office, returned thanks for the honour done him, for an honour he certainly held it to be an officer of the company.

In reply to a question from Mr. Galliff, the CHAIRMAN said at present they were extremely favourable. Last year they had sold about 10001, of produce, and this year not less than 20001. Only 50001, cash had been paid for this extensive property, the remaining 50001, the vendor would take in shares of the company to be formed for working the estate.

In reply to a Sharcholder as to whether the shares in the projected Bayano Company would, in the first instance, be offered pro rata to the Central American shareholders, Mr. Pollock replied that the same plan would probably be followed as that pursued when the Javall Company was brought out.

Dr. SEEMANN explained that the value of the Bayano Estate was so well understood at Panama Itself that he brought home applications for shares in the company to be formed for working it from all the leading bankers, merchants, and foreign consuls at that place. He had himself gone up the Bayano Itser in a steamer of 250 tons, obligingly lent to him by the Panama Railroad Company—company—company—company bould take every pound, and the Pacific Steamship companies touching at Panama would take every pound, and the Pacific Steamship Company

side of the banks. They would be able to sell as much sugar as they could produce. The great steamship companies touching at Panama would take every pound, and the Pacific Steamship Company had already secured the whole of the now-growing crop.

In reply to Mr. Gatliff's question, Mr. Pollock explained the nature of the mortgage of the Tucuyo Estate, and the enormous value of the property, on which the association had advanced but a comparative trifle. It took, Dr. Seemann assured them, ten days to ride from one end of the estate to the other. It was a little kingdom in itself, and the coal beds which Dr. Seemann discovered on the property extended for several miles, the coal itself being valued in London at the rate of 30s. per ton.

In reply to Messrs. Bayley and Bentall's question, Capt. Pin stated that the Central American Association incurred no pecuniary liability in taking up the Mosquito Land Securities. The whole subject had been carefully examined by the association's own solicitors (Messrs. Bischoff, Coxe, and Bompas), and the course pursted was fully approved of by them. The committee of Mosquito bond-holders paid at present a small sum for certain office expenses. No less than 5,500,000 acres of land had been claimed in Mosquita, and towards the end of next week he should issue his certificate for the number of acres he awarded to each claimant: 1s. 6d. for each 1000 acres had been charged for registration. Much dissatisfaction had been expressed in Central America that Gen. Martinez had not settled the Mosquito question when he was in England as plenipotentiary of Nicaragua, and that he had to return to his native country without carrying out the object of his mission. He (Capt. Pim) and Mr. Field would have helped him most materially, but the conditions which the General imposed on the proposed grant of land for 5,000,000 of acres—that the whole should be underectivation five years after they were ceded—were perfectly inadmissable.

In reply to a Sharcholder, who begged pardon for asking how the

#### GENERAL MINING COMPANY FOR IRELAND.

GENERAL MINING COMPANY FOR IRELAND.

The half-yearly general meeting of shareholders was held at the company's offices, Westmoreland-street, Dublin, on Monday,
Alderman REDMOND CARROLL in the chair.

Mr. H. C. FowLer (the secretary) read the reports of the directors and mining manager, of which the subjoined are abstracts—the usual preliminaries having been previously disposed of.

The directors congratulated the shareholders that the property is steadily progressing towards prosperity, and that the favourable anticipations they have always entertained as to the results to be obtained from the manufacture of sine oxide are in a fair way of being realised. At Silver Mines the erection of furnaces, for the production of the zine oxide has been pushed forward with all possible dispatch; but owing to most serious delays, from non-performance of agreement, for fire-clay goods, on the part of a Secteh manufacturing firm, together with the unavoidable detention of ships (from the very stormy and severe winter weather) after some of the goods were shipped, these works were seriously retarded. The most of the needful materials are, however, now received at the mines, and the remainder expected within a few weeks, when the 11 furnaces, which are all now completed, will speedily be ready to commence full operations, which are all now completed, will speedily be ready to commence full operations, which are all now completed, will speedily be ready to commence full operations, which are all now completed, will speedily be ready to commence full operations, which are all now completed, will speedily be ready to commence full operations, which are all now completed, will speedily be ready to commence full operations, which are all now completed, will speed to improvement of the earlies of the same producing; the result has been found fully equal to anticipations, several lots having been already sold at 26%, a ton; and with the arrangements now being carried out for the still greater improvement of the article they are now pr

how in course of erection, are in operation that results of the same further important in the manufacture of zinc oxide, ensuring the production of an article much superior in colour to any they have before made. Eleven new oxide furnaces are erected, with dampers and smoke flues complete. The oxide room and receiving chambers are being prepared, and will be ready by caccion or an article much superior in colour to any they have before made. Eleven new oxide furnaces are erected, with dampers and smoke flues complete. The oxide room and receiving chambers are being prepared, and will be ready by the time the remainder of the materials are on the ground. A brick kiln, with drying-house and tempering-mill, have been erected, and the making and burning of fire-bricks are going on satisfactorily, producing an excellent article, and when the crusher is up will effect a very great saving in this material. The construction of the oxide works has been simplified, and he anticipates the erection of other furnaces and appliances will be done much cheaper, and far more expeditiously. At the Shallee Mine the stopes are without any marked change, producing average work; but he hopes the ore will become more concentrated at the deeper levels. The ground wrought is 102 fathoms. In order to extract all the ore possible from the stamped work, and increase the returns by every means available, some additional percussion tables and other apparatus are being erected and will soon be at work. The machinery is in good working order, and the system of dressing works very satisfactorily.

The CHAIRMAN in moving the adoption of the every constant of the every constant of the system of dressing works very satisfactorily.

The CHAIRMAN in moving the adoption of the report, said that it The CHAIRMAN in moving the adoption of the report, said that it had been so carefully drawn up, with a view to furnish the fullest statement of the condition and prospects of their mines, that but little remained for him to advert to. The company had been very seriously disappointed by the delay which they experienced at the hands of the contractors in Glasgow, who had been engaged to supply piping and other materials for the construction of the new furnaces. The delay had retarded the preparation of oxide of sine for the market, and a serious loss to the company resulted. There were now four furnaces at work, and the others would be very soon completed. Mr. W. R. FAYLE had much pleasure in seconding the motion, and upon the resolution being put to the meeting it was unanimously carried. Mr. D'ARCY, one of the auditors, was glad to be able to state that the books of the company had been kept with the most scruppions care, and that every penny had been satisfactorily accounted for.

In reply to Mr. W. H. Fleffeller, it was stated that 1810, still remained due on calls, and it was determined that the best efforts should be used to collect these arrears, but that for the present legal proceedings should not be taken.

Mr. FLETCHER observed that a considerable sum was charged for the manufacture of fire-bricks at the works, and that the returns of lead for the past half-year appeared to be small.

year appeared to be small.

The CHAIRMAN replied that a vein of clay had been discovered at the works

admirably suited for the manufacture of bricks, and it had been determined to carry on their manufacture, both for their own purposes and for sale. He admitted that the returns of lead for the past half-year had been small, but reminded Mr. Fletcher that the new levels promised well, and there would doubtless soon be an increase in the returns. It would depend on the new furnaces how much oxide, which it had been calculated would return a large sum, would

oduced for the future.

sirs, Eggleston, Drury, and Kelley were then re-appointed auditors; and
the ballot being taken for directors, the choice was declared to have fallen
e-srs W. H. Carroll, R. Carroll, R. J. Devitt, W. R. Fayle, Edward Nolan,

The best thanks of the meeting having been voted the Chairman, the proceedings terminated.

#### SOUTH CONDURROW MINING COMPANY.

A general meeting of shareholders was held at the offices, Austinfriars, on Thursday,—Mr. Buckland in the chair.

Mr. E. King (the secretary) read the notice convening the meeting, and the minutes of the last were approved.

A statement of accounts for the four months ending December showed a debit balance of 326l. 1s, 3d.

The report of the agents was read, as follows:

ing, and the minutes of the last were approved.

A statement of accounts for the four months ending December showed a debit balance of 326l. 1s. 3d.

The report of the agents was read, as follows:—

June 1.—West Basset Lode: King's shaft is now down 8 fms. 2ft. below the search level, sinking through a channel of soft light-coloured granite, having the 2nd to the south, and all the branches we have met with passing through the shaft southward towards the lode. We calculate on reaching the 93 and the shaft southward towards the lode. We calculate on reaching the 93 and the resecting the lode in the latter part of July. The 82 cast is now about 24 fms. beyond King's shaft; the lode in the end is 2ft. wide, composed of soft quarta, beyond King's shaft; the lode is 3 fe, wide, composed of soft friable quarta, prian, &c., and containing in, worth about 2l. per fathom. The 71 cast is now 3e fms. beyond King's shaft; the lode is 1 ft. wide, composed of flookan, mixed with granite. The same level west is 20 fms. beyond King's shaft; the lode is 1 ft. wide, composed of flookan, mixed with granite. The same level west is 30 fms. beyond King's shaft; the lode is 1 ft. wide, composed of flookan, mixed with granite. The same level west is 30 fms. beyond King's shaft; the lode is 1 ft. wide, composed of flookan, mixed with granite. The same level west is 30 fms. beyond King's shaft; the lode is 1 ft. wide, composed of flookan, mixed with granite, forming a highly favourable stratum, in driving through shaft in the level above. The 61 north, on the cross-course, east of King's shaft, has been extended about 45 fms. from West Bissel tole, and is passing through which the north lodes may be cheaply and expeditiously reached. One of these lodes, the engine lode, has been intersected at the 30 fm. level, but none of the others have been seen below the adit. Wood's lode, in this direction, appears to the well worthy of a trial in depth, and to offer very good chances of yleiding good results for copper, more particularly to the we

The CHAIRMAN moved that the report be received, and entered on

The CHAIRMAN moved that the report be received, and entered on the minutes, and that the accounts be passed and allowed. —Mr. King, in reply to questions from different shareholders, stated that he did not see how the costs could be reduced to much less than 400l, per month, for it must be remembered that they were sinking the shaft and diving two ends. —Mr. BIDEN did not know any mine in Cornwall that was being opened up so rapidly and economically as South Condurrow.

Mr. Kino added that an important improvement had just taken place in the nature of the ground through which the shaft was being sunk—an improvement, too, that had been iong desired. Up till the present time there had been too much iron mixed with the granite, which he need hardly say was an objectionable element. That, however, had now died out, and the general characteristies of the ground were everything that could be desired; and the various droppers coming into the lode materially strengthened the belief that in depth remunerative results would be realised.

coming into the lode materially strengthened the belief that in depth reminerative results would be realised.

The Unitaman, referring to the financial position of the mine, informed the Shareholders that the agents calculated upon raising about 800t, worth of ore during the current four months, while the costs during the same period would amount to 1700t, which, added to the debt balance of 300t, would make the total debit at the next meeting 2070t, exclusive of the 800t worth of ore raised in the meantime, and irrespective of any improvement in the mine or in the price of the and copper. If the shareholders now agreed to adopt the recommendation of the committee, and made a call of 3s, per share, the loss upon the four months would be about met.

of the committee, and made a call of 3s, per share, the loss upon the four months would be about met.

Mr. King observed that everything was charged up. The report was ordered to be entered on the minutes, and the accounts passed and allowed.

Upon the proposition of Mr. BIDEN, seconded by Mr. JEFFRYS, a call of 3s. per share was made. The committee of management were re-elected.

A vote of thanks to the Chairman terminated the proceedings.

#### DON PEDRO NORTH DEL REY GOLD MINING COMPANY. An extraordinary general meeting of shareholders was held at the

London Tavern, Bishopsgate, on Monday, Mr. Henry Haymen in the chair.

Mr. JOHN E. DAWSON (the secretary) read the notice convening

The CHAIRMAN said the mail had arrived that morning, and with the permission of the meeting he would, in the first place, call upon the secretary to read the information received. The SECRETARY read the advices, which appear in another column.

The SEGRETARY read the advices, which appear in another column.

The CHAIRMAN said the shareholders had seen by the published telegram—which he might add was the first received in accordance with the expressed wishes of the shareholders—that the probable produce for April would be 15,500 olts.; he thought that must be an encouraging fact to the shareholders, looking to the future. It appeared also that gold had been found in places other than lines Nos. 1, 2, 3, and 4, which was also encouraging, besides which it went to corroborate his (the Chairman's) opinion of the property called Maquine—that, although there would probably be "ups" and "downs," to a certain extent, yet that as the explorations were extended into the mountains, the richer would the stuff be found. If the shareholders took the last three months' working, they would find that although the results had been realized from what might be considered average workings, yet that the directors were able to declare the same amount of dividend as that paid for the first quarter of the last financial year, and carry forward a similar amount; and he could not help thinking that as the works progressed further and further, the dividends would increase. His own opinion was that the results for the year just entered upon, the dividend for the first quarter of which he was about to propose, would place the directors in a position to pay dividends at least equal to those paid during the past year. He had very little more to say upon the present occasion; he had hoped that Capt. T. Treloar would have been sufficiently well to have been present to-day; he had returned to Cornwall, but probably before leaving this country he (the Chairman) would have the opportunity of introducing him to the shareholders. He (the Chairman) and his colleagues of the present control of the most of the first of the past to the most of the first of the past of the first of the past of the first of the past of the first of the other of the past of the first of the past of the first of t bably before leaving this country be (the Chairman) would have the opportunity of introducing him to the shareholders. He (the Chairman) and his colleagues of introducing him to the shareholders. He (the Chairman) and his colleagues as the most troublesome thing in the world to endeavour to suit everybody's convenience; but he might just mention that May 31 was the enal of their first financial quarter. As that had this time fallen upon a Sunday, it would not have been very convenient to have held the meeting on that day, and the previous day (Saturday) was generally considered a half-holiday. Therefore, the board was under the impression that, considering the convenience of all sections of shareholders, to-day would prove the most suitable. They had endeavoured to oblige all sections of the proprietors, but the day selected did not appear to have given satisfaction to the gentlemen connected with the Stock Exchange. All he could say was that the directors always did their best to give the earliest information, and to pay the dividends at the earliest date. He would now simply move that an interim dividend of is, 6d, per share (being upwards of 42 per cent, per annum) be declared for the first quarter ending June.

Mr. WILDE seconded the proposition.

Mr. HILL enquired by what amount the probable produce for April exceeded that of the previous month? — The CHAIRMAN said that the produce for March amounted to 11,500 ofts, against 15,500 ofts. for April.

Mr. HILL also enquired whether the increased produce was attributable to any gw discovery? — The CHAIRMAN said that as far as they yet knew it was due in your store of the previous month? — The CHAIRMAN said that as far as they yet knew it was due in your store of the proposition for the payment of the dividend was put and carried.

The OHAIRMAN said when the monthly documents were received it was impossible to enter more fully into details.

The proposition for the payment of the dividend was put and carried. The OHAIRMAN said what the board last met the shareh

the past would be accepted as an earnest of what might be expected in the future. — The meeting then separated.

#### EAST ROSEWARNE MINING COMPANY.

A general meeting of sharcholders was held at the offices, Austinfriars, on Wednesday,—Mr. Ogilvie in the chair.

Mr. E. King (the secretary) read the notice convening the meeting, and the minutes of the last were read and approved.

A statement of accounts for the four months ending December showed a debit balance of 50%, 68, 10d.

A statement of accounts for the four months ending December showed a debit balance of 50t. 6s. 10d.

The report of the agent was read, as follows:—

May 30.—We beg to inform you that since the last meeting we have sunk King's shaft 5 fms. 4 ft.; for this distance the lode will average 12 inches wide, and worth from 6t. to 10t. per fathom for the length of the shaft (12 feet). We have 2 ft. more to sink to make it 10 fms. below the 105 fm. level. I calculate to do this in a week from this date, when we shall be in a position to drive the 115, east and west of shaft, with all speed; and if the lode should prove as productive in these levels as it has been in the shaft we shall be no a position to drive the 115, east and west of shaft, with all speed; and if the lode should prove as productive in these levels as it has been in the shaft we shall been up a vide, producing stones of ore; and in the last 9 ft. driven the lode has improved in value, now worth 3t, perfathom, and likely to improve as we drive west towards the claward course. The 105, east of shaft, is driven 7 fms.; lode 12 in. wide, worth on an average 4t. per fathom, and they present end is producing stones of ore; and in the last 9 ft. driven 7 fms.; lode 12 in. wide, worth on an average 4t. per fathom, and they present end is producing stones of ore, but not enough to value; I have no doubt but that this lode will resume its former appearance in driving a short distance. The 55, west of shaft, is driven 16 fms. 2 ft.; the lode for this distance will average 12 in. wide, worth from 6t. to 9t. per fathom. The present end is worth 8t. fathom. The rise in the back of this level, 9 ft. behind the end, is up 2 fms. 3 ft.; lode 12 in. wide, worth from 6t. to 9t. per fathom. The present end is worth 8t. fathom. The rise in the back of this level, 9 ft. behind the end, sup 2 fms. 3 ft.; lode 12 in. wide, worth 8t. per fathom. The say of the 105, east of shaft, are worth 6t. per fathom each. Three stopes in the back of the 105, east of shaft, are worth 6t. pe

face 63 mon. 16 boys, and 23 girls.—CHARLES GLASSON.

The CHARRMAN having moved that the report be received and entered on the minutes, and that the accounts be passed and allowed, stated that the general aspect of the different points of operation at the mine afforded the shareholders every encouragement to persevere. One of the most important features was the fact that at the greatest depth attained (the 115 fm. level) such ore was being opened up as to justify the belief that at no distant day results would be realised which would replace East Rosewarne in a profitably productive position. The accounts showed that there was a trifling debit balance, but, as would be seen by the report of the agent, the returns during the current four months would meet the cost, and should the standard for copper ore improve—which it was not too much to hope would soon be the case—shareholders might fairly look forward to a renewal of dividends.—Mr. MCALLAN seconded the proposition.

Mr. King, replying to questions, stated that it was computed the proposition.

holders might fairly look forward to a renewal of dividends. —Mr. M·CALLAN seconded the proposition.

Mr. King, replying to questions, stated that it was computed the returns of the present four months would be equal to those of the past, so that any improvement in the price of copper would place the balance on the right side of the account. Of course, the successive drops in the standard had affected their profits very materially. He wished it to be understood that tutwork operations were being carried out upon an extensive scale, and it should be remembered that a lode in East Rosewarne of the value of \$8.0 rolly, her fim. was in actual value, compared to a lode in other mines, 15t. to 20t., as some of the ends were sometimes driven for 15s. to 20s. per fathom.

The report was received and ordered to be entered on the minutes, and the accounts were passed and allowed.

The committee of management were re-elected. A vote of thanks to the Chairman terminated the proceedings.

#### MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

At GREAT WORK meeting, on May 26, no call was made as anticlpated, but the questionable plan adopted of placing 307l. belonging to the club account to the credit of the adventurers. Costs 4682l., including bills 944l., but we are not informed up to what periods all bills are charged.

At DOLCOATH meeting, on Monday, a dividend of 4l. per share will, it is said, be declared, although some hundreds of pounds extra cost has to be provided for

provided for.

WHEAL AGAR.—The present flatness in the share market is nowhere more manifest than in the price of these shares. The two shafts are seling sunk with every dispatch. In the flat-rod shaft East Pool lode is daily selected to be met with. In the western shaft the lode is producing some very rich stones of copper ore, and, being near the junction of the granite, a great leposit of ore is expected, the same lode having proved exceedingly rich to the way of this mine.

west of this mine.

At the PRINCESS OF WALES MINE they have discovered a splendid lode in the north adit level cross-cut, at a depth of 10 fms. from surface, which is considered by several agents in the locality to be the finest discovery made since Devon Great Consols was started. Samples taken from the lode have been sent to London for the inspection of those interested.

#### FOREIGN MINES.

FOREIGN MINES.

ANGLO-BRAZILIAN GOLD,—Mr. F. S. Symons (May 2): The operations in the mine are progressing very satisfactorily, and we have now a force nearly adequate for our requirements. The appearance of the stone generally throughout the mine is without material change to note since last advised, save in the stopes westand east of Foster's shaft. At the former the lade has become much disordered by killas; but at the latter the appearance of the stone was never so promising as at present, and we can still hope that this body of lode will turn out to be a canoa. The sinking of Dawson's shaft has been resumed, and is being prosecuted with all dispatch. At the deep adit good duty has been done, and one of the auriferous lines running under the foot-wall uncovered. But we are yet unable to say whether the same will come up to our expectations, At present it is very small. Operations have been carried on in the Barril adit, with the view of reaching some old workings in the Mina de Barril. We have extended the old rise 2 feet, and have yet about 5 feet of lodey matter to drive through before holing to the said old workings.

ST. JOHN DEL REY MINING COMPANY (Limited) .- Advices re-

ST. JOHN DEL REY MINING COMPANY (Limited).—Advises to celved June 1 ex steamer Shannon;—
Morro Velho, April 29.—General Operations: Since writing you on the 17th current our general work has gone on steadily, and without interruption at the various points where we are quarrying. The supply of water is unusually small for this season of the year. The whole of the available water at the Cristaes source is now being conveyed to the works.

GOLD EXTRACTED TO DATE.—The produce from the stamps at Morro Velho during the second division of April, being a period of 10 days, is as follows:—

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GOLD EXTRACTED TO DATE.—The produce from the stamps at Morro Velho during the second division of April, being a period of 10

103

Comparing the above produce with that extracted at Morro Velho during the previous or first division of the month, there is an improvement both as regards the yield per ton or the gold return per diem.

First division gave Days. Oits, Oits, per diem. Oits, per ton.

First division gave 12 2078 = 173-1 00 0-976

Second 10 2624 262-4 00 0-753

Gaia, first division gave. 12 569 47-4

"second 507 507 507 507

The improvement in the standard yield of the stone treated in the General stamps is so far satisfactory, and there is reason to hope this improvement may continue. We are at present getting a rather better supply of mineral than we had during the division now reported on.

DAY PERBO NORTH DEL REY GOLD.—Mr. F. S. Symons (May 2):

DON PEDRO NORTH DEL REY GOLD,—Mr. F. S. Symons (May 2): eighed to date 13,503 oits., and we expect the produce for April will amount 15,500 oits. (~1788 oz. Troy). The operations have been revised in Weighed to date 13,503 oits., and we expect the produce for April will amount to 15,500 oits. (—1788 oz. Troy). The operations have been carried on in the usual manner, and the general body of tode yielded well. No. 4 line in the first division of the month made a bunch of gold, then failed, but to date is again improving. The water in the line is giving us a deal of trouble and increasing daily; we have great difficulty to keep it down so as to prosecute the sinking. The lode cut in rise from Alice's north has yielded first-class work; no such has before been seen from Maquine, except in a defined line. The nature and texture are different from the jacotinga yet worked on. No "line" can be traced for any distance, though now and then one is encountered, but again dies out, large pieces of gold have been found, some weighing upwards of 60 oits. The workings, 8 ft. wide, have been extonded west 4 fms. The lode in the breast is 7 ft. high, it has been proved, by explorations north, that it is not a new run of ground, but a large body of lode that has made in a warp or curve of the footwall south of No. 4. It is hoped that the shoot is standing entire from the place intersected to Hilcke's level east. Workings on it are being pushel on with. At the shallow adit the ground has been very wet, and little progress has been made. At the middle one good duty has been done. One corps is working at the deep adit. In our exploratory works there is nothing new.

ROSSA GRANDE GOLD.—Mr. Ernest Hilcke (April 30): Little altera-

Rossa Grande Gold.—Mr. Ernest Hilcke (April 30): Little altera-ROSSA GRANDE GOLD.—Mr. Ernest Hilcke (April 30): Little alteration has taken place in the appearance of the lodes since my last. The lode in extending the adit level east is getting smaller in size, but it is opening more in the stopes at this place towards the air-shaft. Our principal force and main strength is put in sinking the air-shaft, and we are pushing on with all speed to attain this most desirable communication. Seven fathoms have been sunk in this month, and 9 fathoms more have to be sunk before we shall intersect the adit level; this I hope will be completed by next month. Our gold cleaned up to the 20th instant inclusive amounts to 459 oits.

FORTUNA .- May 23: Canada Incosa Mine: In the 110, east and west of O'Shea's shaft, no change is apparent since last report. Good progress is being made in the 100, west of O'Shea's shaft. The lode in the 90, west of Judd's shaft, is compact and regular, producing 1 ton of lead ore per fathom. In the bottom of the 80, west of Judd's shaft, there are good stones of ore, yield the

ing  $\frac{1}{2}$  ton per fathom, but the upper part is poor. The ground in the 80 cross-cut south has become a little easier for driving during the past week. A great ing \( \frac{\psi}\_{\chi} \) for per fathom, but the upper part is poor. The ground in the 80 cross-cut south has become a little easier for driving during the past week. A great improvement has taken place in the 70, cast of Carro's shaft, and it still continues to improve; the lode yields atoms of ore per fathom: The \( \frac{\psi}\_{\chi} \) for a start of Carro's shaft, and it still continues to improve; the lode yields atoms of ore per fathom: The \( \frac{\psi}\_{\chi} \) for a small, and the ground very much broken up. Picou's whaze, sinking below the 100, yields \( \frac{\psi}\_{\chi} \) for ore per fathom; the lode is not so productive as it was, but has stiff, a very promising appearance.—South Lode: The lode in the \( \frac{\psi}\_{\chi} \) cast of San Pedro shaft, is large, composed of quartz, intermixed with lead ore, yielding \( \frac{\psi}\_{\chi} \) for per fathom. The \( \frac{\psi}\_{\chi} \), west of San Pedro shaft, the lode, which yields \( \frac{\psi}\_{\chi} \) fon per fathom. In the \( \frac{\psi}\_{\chi} \) west of San Pedro shaft, the lode, which yields \( \frac{\psi}\_{\chi} \) for or ore per fathom, is still small, and the ground hard for driving.—Los Saildos Mine: The lode in the 100, west of Morris's engine-shaft, is small, and the ground hard for driving.—Los Saildos Mine: The lode, cast of Morris's engine-shaft, the lode is large and strong, but has greatly failen off in value during the last few days, yielding now \( \frac{\psi}\_{\chi} \) ton per furthen of in value during the last few days, yielding now \( \frac{\psi}\_{\chi} \) ton of ore per fathom: The lode is very enangeable, and has in the past fortnight been opening ground worth 2 tons per fathom. The \( \frac{\psi}\_{\chi} \) cast of San Pahlo's shaft, yields \( \frac{\psi}\_{\chi} \) tons of ore per fathom. The \( \frac{\psi}\_{\chi} \) to so fore per fathom. The \( \frac{\psi}\_{\chi} \) to so fore per fathom. Shafts and the ground is much harder than it has been. We have commenced sinking and Gardiel shaft below the \( \psi\_{\chi}

ALAMILLOS,-May 25: The lode in the 4th level, east from La Mag-ALAMILLOS.—May 25: The lode in the 4th level, east from La Magdalena shaft, is small, and the ground very hard. The 4th level, west of La Magdalena shaft, yields I ton of ore per fm.; the lode is less productive than it was, but has still a good appearance. We expect to hole the 4th level, east of Taylor's shaft, during the present week. The lode in the 5th level, east of Taylor's engine-shaft, is large, yielding stones of ore occasionally; the ground is easy. In the 4th level, west of San Andriano shaft, the ground is hard, and the lode small and poor. The lode in the 5d level, west of San Jago shaft, is large, composed of calcareous spar and barytes, with stones of lead orc. In the 2d level, west of Crosby's cross-cut, the lode, which yields ¾ ton of ore per fathom, has slightly improved, and the ground has become a little casier.—Shafts and Winzes: Good progress is being made in sinking La Magdalena shaft below the 4th level. We have been obliged to suspend the sinking of San Guilfermo shaft below surface, in consequence of an increase of water. Gil's winze, which is being sunk in the bottom of the 4th level, west from La Magdalena shaft, produces 2 tons of ore per fm. The lode in Barga's winze, below the 5d level, is unproductive. Alfonso's winze, below the 2d level, yields 1 ton per fm.; this is being sunk in advance of the 3d level, west from San Yago. The lode in Perez's shaft, below the 2d level, has changed its underlie, and become more productive; it now yields 1 ton per fathom.

Linares.—May 23: West of Engine-shaft: The lode in the 110,

it now yields I ton per fathom.

LINARES.—May 23: West of Engine-shaft: The lode in the 110, driving west of San Tomas engine-shaft, is improving; it now yields \(^3\)\_1 ton of ore per fathom. In the 75, west of Warne's engine-shaft, the lode is large, consisting chiefly of quartz, carbonate of lime, and lead ore, producing of the latter \(^3\)\_1 ton per fathom. The 30, cast of San Francisco shaft, yields 1\)\(^1\)\_2 ton per fathom of the latter of the state of the sta

below the 31, yields I ton of ore per fathom; the lode is very iirm and compact, consisting chiefly of quartz and lead ore.

LAGUNA.—J. R. Rule, April 7: The mine is now completely drained, and I expect that the working will be actively resumed in the course of a few days. There are two circumstances which have hindered the workmen (barreteros) from setting themselves to work earlier—one is, that the custom of the district having been to get 4 reals per day and one-eighth part of the ores; and with respect to the Arevalo Mine, the principal mine in the district, an alteration has been made whereby the eighth part of the ores has been substituted by a tenth part, which reduction, however, these barreteros seem to question if it be obligatory on them to adopt in every mine, and I understand there has been much discussion amongst them respecting its adoption in the mine of Laguna, but I have intimated to them that there cannot be two laws for one district, and that which has been established for Arevalo is the same under which they must work in Laguna, which is 4 reals per day, and one-tenth of the ores they break, or instead of the 4 reals per day the measurement of the ground driven or sunk at a price, with one-tenth of the ores. This subject, however, I am informed, has detained them for a week past, and now the "holy week" has set in, during which, by custom, little work is done, but this over I have no doubt that the working will be carried on in carnest.

LUSITANIAN.—May 26: At Taylor's engine-shaft, below the 120.

by my which, by custom, little work is done, but this over I have no doubt that the working will be carried on in earnest.

LUSITANIAN.—May 26: At Taylor's engine-shaft, below the 120, the lode has not been taken down for the last fortnight, but from its appearance we judge it to be worth 1½ ton of ore per fathom. Here shaft, below the 90, is now down to the 100, and the men are put to drive west of the shaft to communicate with the level coming east of Taylor's. The lode is 1½ ft. wide, composed of a dry flookan.—Basto's Lode: The 120 fm. level, east of Taylor's, yields I ton of ore per fm. The 120 west also yields I ton per fathom. The 101 fm. level, west of Taylor's, is composed of flookan and stones of ore. The 110 fm. level, west of River shaft, is 1½ ft. wide, composed of flookan and stones of ore. The 101 fathom level west yields ½ ton per fm. The 100 east is composed of a dry flookan; we expect to communicate this level with River shaft next month. The lode in the 35 fathom level, west of Perez' shaft, is split into small strings. In the 18 the lode is small, composed of quartz and nundle. The lode at the adit is very small, but contains a little black oxide of copper, and is letting out a little water, but the ground is hard.—Ponte Lode: The lode in the 100, cast of cross-cut, at Taylor's, is in a disturbed state, being a mixture of flookan and country. The 30, east of slide, is composed of flookan. The 80, cast of slide, yields ¾ ton per fathom. The cross-cutsare of the same character as when last reported to per fathom. Mo. 72 winze, below the 10, west of Taylor's, produces 2 tons of ore per fathom. No. 72 winze, below the 10, west of Taylor's, produces 2 tons of ore per fathom. No. 72 winze, below the 10, west of Stopes above the 18, west of Fonsaca's winze, the lode is worth ½ ton per fathom.—In the stopes above the 80, cast of Taylor's, the lode is worth ½ ton per fm. In the stopes above the 80, west of No. 64 winze, the lode is worth ½ ton per fm. In the stopes above the 100, cast of Taylor's, th LUSITANIAN,—May 26: At Taylor's engine-shaft, below the 120.

VAL SASSAM, -- May 30: I have just returned from the Tospino VAL SASSAM.—May 30: I have just returned from the Tospino Mine, where I am pleased to tell you we are getting pretty rapidly into a fair way of working. We have now a staff of men at the mine preparing stuff for the crusher, which I hope we shall be able to keep regularly at work for a considerable time. During the week we have commenced sending crusher stuff down the wire-rope incline; it works well. For reasons which I stated in my last letter—the disorder in which the severe winter left the dressing works, and the time necessarily taken up in preparatory arrangements—we have not been able to get out so much ore during the month as I had hoped. As we have not yet weighed nor sampled I cannot say exactly what our returns from Tospino will be—between 3 and 4 tons probably of, I think, tolerably fair percentage for those ores. I regret to say the stuff is very poor, and a great deal has to be handled for a small quantity of ore. I believe, however, with some new, and modifications of all appliances, with what promises to be a fine summer, and with a for a small quantity of ore. I believe, however, with some new, and modifica-tions of old, appliances, with what promises to be a fine summer, and with a vigorous effort, we shall succeed in returning a good many tons of lead ore dur-ing the season. Up at the mine there is still a good deal of snow in some of the stopes, but it is rapidly leaving. We shall sample, I suppose, about 15 or 16 tons from Ursera. I have nothing new to tell you of this mine.

THE TIN STANDARD.—No change has taken place in the tin standard, but the trade continues in a very quilet state. The present quotations are—Common, 88s. to 89s.; fine, 90s. to 91s. It will be remembered that Wheal Seton adventurers resolved at their last meeting that all the ores should in future be sold by tender. Accordingly, on May 29, tenders were received from five out of the eight Cornish tin smelters, as follows;—Bissoc Company (Tregoning and Co.), 57l. 15s.; Redruth Company (Lanyou and Co.), 57l. 10s.; Daubuz and Co., 56l. 17s. 6d.; Gatley and Co., 56l. 18s.; Bolithe and Co., 55l. 12s. 6d. An excess of 2l. 2s. 6d. per ton from the lowest to the highest. It will be observed no tenders were received from the Williams's—one of the two leading houses—R. Michell and Co., or Enthoven and Co. It is worthy of note that the tin smelting firm who have for a long series of years been the exclusive buyers of Wheal Scton tin ore (and who were, doubtless, the best judges of its quality), have, the first time they were sold by tender, become the purchasers, at a trifling excess beyond their competitor. Some of those interested in Creegbrawse and Penkevil Mines have been astonished to find the resolutions of the adventurers at their recent meetings set at naught. It was resolved, April 1c (although the purser, Mr. W. H. Tregoning, and the manager, Mr. Francis Pryor, argued against the propriety of this step), that in future all tin raised in these mines shall be sold by tender; yet the tin has not so been disposed of, but divided up between the Williams's, the Redruth Company, and the Bissoc Company. The managers have a perfect right to move the resoluding of this resolution, but as long as it remains on the cost-book it should be serupulously adhered to.—West Britton.

London General Omnibus Company.—The traffic receipts for THE TIN STANDARD .- Nochange has taken place in the tin stand-

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for

Now ready, price 5s., by post 5s. 4d.,

### STATISTICS OF THE MINES OF CORNWALL AND DEVON,

WITH OBSERVATIONS UPON THEM.

#### By THOMAS SPARGO, STOCK AND SHAREDEALER, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

I beg to inform the mining interest that my work, under the above title, for 1866 and 1867 is new ready. It contains the following particulars—viz., the geological position, present prospects, names of purser, manager, and sceretary, with statement of the annual returns of each mine during the last two years, and of total dividends paid to the present time. The work is illustated by a map of Cornwall and Devonshire; geological district maps, divided into clight sections, in which will be shown the boundary lines of each parish, height of hills, sources of rivers, &c.; maps of St. Just, St. Ives, Marazion, Heiston, Gwinear, Chiverton, Bodmin, Liskeard, Devon Great Consols, Ashburton, and Exmouth

mining districts, showing boundary lines of each property, with the lodes, &c.,

mining districts, showing boundary interest and an experience of the interest in traversing them. It also contains transverse and longitudinal sections of Dolcoath Mine (kindly supplied by the late Captain Charles Thomas); section of workings in Botallack Mine (supplied by the manager, S. H. James, Esq.); longitudinal sections of workings upon the main lode in Great Wheal Vor and Tresavean Mines; geological map of the Fowey district (supplied by Major Davis, R.M.); historical account of the Devon Great Consols, and of all the principal mines in the two counties.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS. MINING AGENTS, STOCK AND SHARE DEALERS, &c. 1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Thanks for the great patronage bestowed and confidence reposed in their most sortered thanks for the great patronage bestowed and confidence reposed in their firm for 28 years, and to assure their friends and clients it will be their carnest endeavour to merit a continuance of both.

Mesers, WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circulation for many years, to the columns of the Mining Journal, their special reports and remarks upon mines and mining, and state of the share market, will in future appear in this column. In the year 1813, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1817, and published in 1818, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1822), "Cornish Notes" (second series, 1823), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1813, Mr. WATSON was the first to recommend the system of a "division of small risks in several native, ensuring success in the Compendium, published in 1813, Mr. WATSON was the first to recommend the system of a "division of small risks in several native, ensuring success in the auggregate," and Messars, WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advect in regard to mines and share dealing than there is a tyresent; and, from the lengthened experience of Messrs, WATSON BROTHERS they are embolished tooffer, thus publicly, their best services to all connected with mine or the market, as they have for so many years done privately, through the mechanic captering and sale of

emboldened to offer, thus publicly, their ness services that the purchase and sale of or the market, as they have for so many years done privately, through the medium of their own Circular.

Mesers, WATSON BROTHERS transact business in the purchase and sale of rining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for ellents, and affording advice, to the best of their knowledge and judgment, basel on the experience of more than 30 years active connection with the allining Market.

Mesers, WATSON BROTHERS also inform their clients and the public that they transact business in the public finds, railway, docks, insurance, and every other description of shares dealt in on the stock Exchange.

Mesers, WATSON BROTHERS are also daily asked their orbition of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining district, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so diactualing as mining.

as mining.

Mesers. WATSON BROTHERS having agents and correspondents in all the mining districts and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

or commission.

SATURDAY, MAY 30.—Market very quiet, and not much alteration a prices. Prince of Wales, 42s. to 44s.; West Prince of Wales, 9s. to 11s.; Chondles, 145 to 176; Chiverton Moor, 6 to 64; Great Retallack, 246 to 236; West hiverton, 60 to 62. ex. div.; Wheal Kitty (St. Agnes), 2½ to 234.

MONDAY.—The Exchanges closed to-day.

TUESDAY.—Market quiet, but prices almost nominal. South Herodsfoot, 15s. 20s.; Redmoor, 2s. to 4s.; Prince of Wales, 42s. to 44s.; Chontales, 134 to 176; hiverton Moor, 6 to 6½; Great Retallack, 236 to 236; Marke Valley, 6½ to 6¾; footh Croft, 15s to 24s.

to 20s.; Reumon, 2s. to 4s.; Trince that lack, 2½ to 2½; Marke Valley, 6½ to 6½; North Crofty, 1½ to 2½.

North Crofty, 1½ to 2½.

WEDNESDAY,—There has been a moderate demand to-day for Great Retallack, Redmoor, South Herod-foot, Seton, West Frances, and Prince of Wales shares, at an advance. Great Retallack, 2½ to 2½; Redmoor, 4s. to 6s.; South Herod-foot, 15s. to 20s.; Seton, 80 to 85; West Frances, 30 to 32½; Prince of Wales, 4s. to 1s.; Chiverton Moor, 6 to 6½; Great Laxey, 10½ to 17; West Prince of Wales, 9s. to 11s.; West Chiverton, 60 to 62½.

THURSDAY,—The market is quiet, but Retallack shares at 2½ to 2½, South Herod-souta, 15s. to 20s., Redmoor at 4s. to 6s., and Prince of Wales at 42s. to 44s., are firm: Marke Valley, 6½ to 6½; Chiverton Valley, 6 to 6½; Chontales, 15c. 2; West Frances, 20 to 32½; East Grenville, 34s. to 36s.; Wheal Trelawny, 8½ to 9½; Prince of Wales, 44s. to 43s.; Chiverton Moor, 6 to 6½; Great Laxey, 16½ to 174; West Chiverton, 60 to 62½, chiefly dealt in; Wheal Chiverton, 60 to 62½, chiefly dealt, 60 to 62; c

#### Mining Correspondenge.

#### BRITISH MINES.

BRITISH MINES.

ABRAHAM CONSOLS.—J. Vivian, June 1: The ground in slaking No. 2 shaft is not quite so hard as it have been, and for this reason I expect a change for the better in the lode shortly.

BEDFORD UNITED.—James Phillips, June 3: The lode in the shaft and plat is about 4 ft. wide, worth 3½ tons of ore per fathom. In the 90 end east the ground is easier, and we are driving by the side of the lode. We are driving by the side of the lode. We are driving by the side of the lode in the 75 east. The stope in bottom of this level is worth 4 tons, and the stope in bottom of this level is worth 4 tons, and the stope in bottom of this level is worth 4 tons, and the stope in bottom of the same as for some time past.

BOTTLE HILL.—J. Eddy, June 4: Main Lode: The lode in the 12 is about 5 ft, wide, all saving stamps work. The lode in the 24 is about the same size, producing both copper and tin: the produce for this rather low.—South Lode: The lode in the 12, west of shaft, is now about 18 in. wide, saving work for tin, but the ground is rather harder than assal. The lode cast of shaft, in the same level, is about 2½ ft. wide, and looking well. The sample is sent off, and I expect to go to Truro to see the weight of it on Saturday or Monday next. The Institution of the 12 is been seen to the same size, BRONEOVE UNITED.—Thos. Kemp, June 3: Settings for June: The new shaft is down 6 fms. under the 63 fm, level, and a bargain has been set to six men to sink it five additional fathoms, for 1004, and if completed in three months the men are to have 34. as a gratuity. The lode in the bottom of the shaft is without any change, being chiefly composed of hard spar. The lode appears to be more perpendicular, consequently we shall have to sink the shaft deeper than we expected before we get to its ore-bearing part. We have set six men to stope down the south part of the lode to the west of cross-cut in the 63, at 55s, per fathom; the lode is worth about 2 consoled appears to be more perpendicular, consequently we shall have to

ground, as we are opening out another shaft, which will give us every facility for the better development of our western ground. No alteration to remark it any other part of the mine. We expect to sample about our usual quantity of lead for the next week's sale,

BWADIRAIN CONSOLS.—R. Northey, May 28: The lode in the 45 fm. level has improved, worth 1 ton 8 ewis, of lead ore per fathom. There is no change in any other part to notice. We are going on well with the rods, &c., for pumping the water to the crusher. The water is very scarce for crushing.

GAPE CORNWALL.—R. Pryor, F. Hosking, June 2: We hope to be able to drain the 90 whize in course of a fortaight, when we shall at once commence to drain the eross-cut north at the 160. In taking the run of the Wheal Owl lode in 8t. Just Amalgamated, we are induced to think that this cross-cut will intersect it in a short distance driving; this is a great feature, the lode having and continues to yield such a large quantity of the in the before-named mine, and will be found all in whole to surface in this mine, this cross-cut will also intersect three other well-known lodes that exist in this sett. The ground in the 70 cross-cut, driving south of shaft, continues just the same as for some time past, but the end is letting out a little water, as if near the lode or branch.

CEEN BIRWYNO.—J. Paull, June 3: The lode in the 92, cast of engine-shaft, is improved, now being 3 ft. wide, and will produce i ton of lead ore per fathom. At the 80 cast the lode is 2 ft. wide, not so rich as when last reported on, although a very promising lode, now worth 15 cwts. of lead ore per fathom, and I have every reason to believe will soon improve again. The same level west of shaft is in a large and strong lode, containing good branches of lead ore, producing saving work. The 55, in the deep additived east, is in a lode 3 ft. wide, of a very promising character, containing good strings of lead ore, and from present indications an early improvement may be expected. All other points

In the mine are without any change to notice since last reported on. We hope to intersect the north lode very shortly, as the cross-cut is now nearly extended as far north as the line of the lode seen in the western part of the mine, although we may have to drive some distance further than first expected, as the lode may have taken a more northerly direction, but this will soon be proved now. We shall be able to sample about 20 tons of lead cre by this day week. I consider the prospects of the mine, on the whole, to be very cheering.

CARADON CONSOLS.—S. Bennetts, June 2: In the 75 west the small cross-course has been cut through. The south part of the lode on the west shorth of this another branch has been cut, from 6 to 9 in. wide, containing some very good ore, associated with fluor-spar and prian. The underlie of this branch is only 1 ft. per fathom, and, consequently, will fall into the lode a few feet below the level. The winzo below the 58 has not altered much during the week; nor has the lode in the 68 fm. level west end, but the ground has become casier. CHANTICLEER.—Wm. Walsey, June 4: Last Saturday being the end of the month, I suspended the level driving west of shaft, and set to four men to rise in the back of the level at 30s, per yard, and 80s, per ton for ore, the men to pay all costs, as usual; the lode is about 3 ft. wide, composed of clay and spar, and producing some very fine lumps of ore, worth full 5 cwts. per yard, with a very promising appearance.

CUDNEA.—E. Peckey, June 3: We have commenced sinking a winze below

reducing some very fine lumps of ore, worth full o twiss per yata, remaining appearance.

CUDBRA.— F. Puckey, June 3: We have commenced sinking a winze below he 100, west of Walker's shaft, about 5 fathoms in advance of the 130 fathom evel end. We have apparently a very good lode for tin in this winze, but as we have not yet reached its south wall, we cannot report its full size or value, is far as seen, the lode is looking exceedingly promising; it is composed of martz, and a beautiful character peach. The south part of the lode, so far as een, is producing some rich work for th; this looks very encouraging for our 30 fathom level. In consequence of the lode not being sufficiently drained beow the 100, we deemed it advisable to commence cross-cutting the lode at once in the 130 to drain the same, in order to facilitate the sinking of the winze beow the 100 fathom level as rapidly as possible. All the other parts of the mine we without alteration.

squartz, and a beautiful character peach. The sonit part of the lode, so far as jecu, is producing some rich work for thi; this looks very encouraging for our 130 fathom level. In consequence of the lode not being sufficiently drained being the part of the low the low fathom level as rapidly as possible. All the other parts of the mine without alteration.

EAST CARN BIKBA. Richards, June 3: In the 80 mileyed east the lode fathom level as rapidly as possible. All the other parts of the mine are without alteration.

EAST CARN BIKBA. Richards, June 3: In the 50 mileyed east the lode fathom level as the lode of the low fathom level as the lode of the lot of lot

department for the next sampling. All the machinery is very efficient, and working well.

GAWTON COPPER.—G. Rowe, G. Rowe, Jun., May 30: We are progressing as fast as the nature of the work will admit in sinking King's shaft below the 70 fm level. There is no change in the character of the lode in the 70, west from cross-cut, since last reported on. The lode in the 70 east is showing indications of improvement, and yielding 2 tons of ore per fathom. The lode in the 60 east is looking kindly, and worth 1½ ton of ore per fathom. The lode in the 60 east is looking kindly, and worth 1½ ton of ore per fathom. We sampled yesterday (computed) 131 tons of copper ore.

GLASGOW CARADON.—Wm. Paylor, June 2: Caunter Lode: The 78 west is not looking quite so well; it is producing saving work. We are expecting daily for this end to drain the winze in the bottom of the 65, and to resume the sinking. We have one end driving east of the stope towards the 52, worth 121, per fathom. We shall communicate here as soon as possible. The stope on this lode continue to yield their usual quantities of ore.—Arroll Lode: The 78 west produces stones of ore. The 65 east is worth 81, per fathom. The 52 west is still driving by the side of the lode; we hope to hole to the stope from the 65 in a few days, which will give us good ventilation. The stopes in this lode are worth from 81, to 101, per fathom.—Harvey's Lode: The 65 east is worth 81, per fathom from 101, to 121, per fathom.—The ore sold on Thursday last (computed 263 tons) weighed off 270 tons, realising 983, 11s. 90.

GREAT CARADON.—F. C. Harpur, June 1: Our operations here are being conducted as vigorously as possible, and the sinking of the engine-shaft from the 71 to the 82 fm. level is progressing as fast as the nature of the ground will admit of, by nine men, both by day and night; the ground just now is rather hard, consisting of capel, intermixed with small veins of peach and quartz, and etcting out a quantity of water, which makes it rather difficult for exploring. As soon as

in the next level we shall find further improvement. The engine and pitwork are all in good working condition; and my best endeavours shall be put forward to carry out the points of operation as speedily as I possibly can.

GOGINAN.—June 3: The lode in the 110, east of winze, below the 100 fathom level, is steadily improving as the level is advanced under the ore ground seen above, and now yields 15 cwts. of lead ore per fathom. The same level, west of winze, is in a lode 3 ft. wide, which contains good strings of lead ore, producing saving work. The lode in the present end of the 100, east of rise, is large, showing a little ore, but not of any value, the ground being rather soft. There are three stopes over this level, where 22 men are employed, producing on an average 17 cwts, of lead ore per fm. The lode in the stope over the drift, west of rise, is 4 ft. wide, and yields 12 cwts, of ore per fm. In the cross-cut north in the drift, west of rise, we are still meeting with strings of lead ore, and as soon as the lode is properly cut through we shall commence to drive east on the main part of it. The tribute pitches in the old part of the mine are yielding from 9 to 12 cwts, of ore per fm. We sampled 35 tons or good quality ore from this mine on Tuesday last.

17 cwts, of lead ore perfm. The lode in the stope over the drift, west of rise, is 4 t., wide, and yelost 32 cwts, of ore per fm. In the cross-cut north in the drift, it is the perfect of the mine and yelost 32 cwts, of ore per fm. We sampled 33 tons of good quality ore from this mine of it. The tribute pitches in the old part of the mine are yielding from 9 to 12 cwts, of ore per fm. We sampled 33 tons of good quality ore from this mine or Thready 18 cmt. DOWNS.—W. Bich., C. Bawden, June 2: The 54 end, west of King's, is worth 162 per fm; we are not yet able to sink this shaft, on account of the water, but intend to do so as soon as it is dity. There is nothing new to report on in Sieggau's shaft; we shall commence to cut through the lode after the end of next week. The 4's west sivery stiff for driving, and the lode after the end of next week. The 4's west sivery stiff for driving, and the lode at Vivian's engine-shaft; yelds good stones of ore.

GREAT SELALACK.—G. R. Odgers, James Harris, June 3: The engine-being done with a view to put the engine to work by Midsummer Day. Selection of the control of the control of the perfect of the control of the perfect of the control of the perfect of the perfec

is now out 102 yards, and very good progress is celling made with the driving; the appearance of the ground for ore, I am glad to say, has improved the last yard or so driven. The tributers working near Bright's shaft are getting on middling weil.

NEW BIRCH TOR AND VITIFER CONSOLS.—W. Skewis, June 2: The new shaft is sunk about 4 fms. below the 48 fm. level; the lode in it is about 1 foot wide, yielding saving work for tin. The 48 fm. level east we thought best to suspend for the time, and put the men to sink a winze in the bottom of this level, about 20 fms. west of new shaft, where the lode is worth 51, per fm., so as to have it down to a 60 fm. level in the summer months. The winze in the bottom of the 48 fm. level west, on the main lode, is down 11 fms., and laid open ground to the value of 41, to 51, per fm. for the whole distance, and in the bottom is worth 51, per fm. This is now suspended, and the men put to sink Hambly's engine-shaft at 64, 10s, per fathom, and 64. los, premium if completed in three months after the lift is fixed in the 36 fm. level, which we consider requires a fortnight. In the 12 fm. level west the lode is 1½ ft. wide, a very promising lode, but not to value; there is also a beautiful elvan on each side of it. We have no change to notice in the tribute department.

NEW CROW HILL —Wm. Trelease, June 2: Nothing new to report to-day, Stopp No. 2 is looking fully as well as reported on last week, and is worth in places at least 451, per fathom. The ground in the winzo below the 70 is easier for sinking through. Good progress is now being made in the sinking of Louisa shaft. No change in the cross-cut in the 60 east; the lode in the same level, in the east end, is 5ft. wide, very large and mundley, with occasional stones of lead. Our little parcel of ore sold last week welgbed over 12 tons, and realised 3371.; and I hope to sample over 3004. worth against our next pay, independent of 3 tons sampled yesterday from the bottom level at Louisa.

NEW GREAT CONSOLS.—Richard Proy, Richard Trat

wide, with good stones of ore, and very wet indeed. The stopes in the back of the 60 are without changesinee last reported on, worth 51, 10s, per fathom each. The lode in the bottom of the 10, west of Nicholson's shaft, is worth 41, per fan. NEW WHEAL TOWAN.—R. Pryor, June 3: The lode in the adit level west has very much improved, and is now fully 2 ft. wide, composed of mundic, peach, spar, and good stones of copper ore. We have a part of the lode still standing to the south of the level, and have broken from it some good samples of tin. I am induced to think that this is standing for a good many fathoms in length, and is likely to yield some good work.

NORTH DOWNS.—F. Pryor, J. Grenfell, June 3: In the 60 west the lode is still very regular, and has a promising appearance, but has not improved in value since last report; we have ordered the men to cut in south, in order to prove if there is any more of the lode standing in that direction, which we shall prove in the course of a few days. The rise in the back of this level is still worth 151, per fathom. The stope in the back of this level is worth 104, per fathom. The winze sinking below this level is improved, now worth 104, per fathom. The winze sinking below this level is improved, now worth 104, per fathom; this is important, as it is to communicate with the rise in the back of the 60, and wilk open up a valuable piece of ore ground. A stope in the back of this level, we have taken down the lode for the length discovered in driving the cross-cut, which is 15 in. wide, with a rich leader of copper ore and spar 6 in. wide, worth 64, per fathom, with a very promising appearance; we look upon this as an important feature in the mine, as it is all in whole ground. We have commence to send down the pumps to fork the water from the 85 to the 95, which we hope to accomplish against our next setting, so as to set the shaft to sink below the 95 on that day. We have all the pitwork on the mine that will be required to sink the shaft to the lode in the winze sinking

we ric

130 fm. level end about 3 fathoms, and is being drained quite dry by the end; this end is also producing good stones of copper ore, with every appearance of an early improvement. We may also remark that the eastern ground, which has been so long talked of, is added to our sett, giving us in some of our levels about 200 fathoms more on the course of our lode. Tuesday next being our general meeting of the adventurers a full and detailed report will be made out for the shareholders, and we are glad to say that our prospects, on the whole, are looking better.

about 200 fathous more on the consist of the detailed report will be made out for the shareholders, and we are glad to say that our prospects, on the whole, are looking better.

NORTH WHEAL CHIVERTON.—William Hancock, June 1: Setting Report: The engine-shaft is sunk 9 fms. below the 90, and going down in a beautiful channel of ground. The 90 end east is about forth under the first winze sunk east of Mew's shaft, and is at present suspended, and the men put to rise against the winze; set to six men, 5 fms. stent, at 25s. per fathom; lode of a most promising appearance, producing occasional stones of silver-lead. In the same level west we have cross-cut south 9 ft., and have the part the winze has been sunk on over producing lead and blende, worth about 52. per fathom. The winze is down 9 fms., of the same value; at present suspended, and two of the men placed with the men below to rise against it; set to six men, 3 fms. stent, or hole, at 70s. per fathom. We shall also draw out the water in the winze east of Mew's shaft, and resume sinking it by two men. As soon as these rises and winzes are communicated to each other we shall resume the driving of the 90 fm. level ends with all speed. We have also set a tribute pitch in the ends of the winze, west of Mew's shaft, to two men, the month, at 44. 10s. per ton for lead only. To fill and land all the stuff at the different shafts by three men, or more if required, the month, at 11. 10s. The setting and pay passed off as usual.

NORTH WHEAL CROFTY—J. Vivian and Son, W. Thomas, jun., June 4: In the 20s fm. level, both east and west of the engine-shaft, we are making good progress towards the tin ground discovered at levels above, the ground being easy for driving through. The 186, west of Petherick's shaft, has improved, being now worth 71. per fathom. The 186 west is passing through a large lode, worth 10, per fathom. Petherick's shaft is now 4 fathoms under the 196, sinking by the side of the lode, in order to make greater speed. Praed's shaft, nost of Praed's shaft,

some time. We soid yesterday 14 tons 19 ewts. 2 qrs. 2 lbs. of black tin, at 581. 2s. 6d., realising 5701. 9s. 4d., and shall sell a smaller parcel next week. NORTH WHEAL ROBERT.—W. Godden, June 4: The ground in the crosscut south at the 62 is easier for progress, and there is a little water coming from the end.

OKEL TOR.—John Rodda, June 2: There is still a large stream of water coming from the breast of the 80 fm. level end east; the lode here is composed of capel, spar, mundic, and spots of ore. We are driving north also, to prove whether a part of the lode is standing in that direction, and are doing all that lies in our power to drain the winze in bottom of the 65 as quickly as possible, which I hope will soon be done. The lode in the 65, west of Hele's winze, is looking very promising indeed, and will produce 4 tons of ore per fathom. The stopes east and west of the winze, in bottom of this level, will yield 5 tons of ore per fathom, and the three stopes in back will yield on the average about 3 tons of ore per fathom. We have cut into the lode in the 65 cast about 11 ft., and no sign of being through it; so far as seen, it consists of a strong capel and spar, impregnated with mundie and ore, but not sufficient to value. The two stopes in the 50 will yield 2 tons of ore per fm. each.—North Lode: Treloar's stope, in back of the 80, west of Reynold's winze, will yield 2 tons of ore per fm.

OLD GUNNISLAKE.—H. Rickard, June 3: Our progress in clearing and laying tramroads, both in the 81 and 91, on the Green lode, is still very good, having but little ground to take down to make room for the tram-wagons. We find some ground in the back of these levels which will be taken away at a moderate tribute as soon as these levels are cleared, which I hope will be nearly completed by the end of this month, from what I can see a present the consumption of our coals. The engine is sworking as our hree strokes per minute. Sumption of our coals. The engine is sworking a now there strokes per minute. PENN AN DIEA UTSTAN C

one in the bottom of the 26, east of Battyo's shaft, at 13s. 4d. The machinery is in good working order.

PENHALE UNITED.—R. Pryor, H. Bennetts, J. Pryor, June 3: Morcom's shaft is cleared, timbered, and footway put in to the 70 fm. level, and the men are engaged in completing the same to the 80, which is being pushed on with all possible speed, and which attained the level will be cleared, in order to resume the driving of the same in a good lode of lead. Phillips's engine-shaft men are busily engaged in completing the shaft to the 90. The tributers are working well and getting good wages, and as soon as Morcom's shaft is completed to the 80 we shall be able to set a great many tributers to work in ground that will pay well. All surface work is progressing satisfactorily, and the dressing of lead is going on as fast as possible.

the deprine of the same in a mode color band. Pulling's eighter-shall mean ray with an altitude of secretary and the same of t

fore again removing the steam-power I should like to master the run, and get at least 10004, worth of tinstuff. We had another run of the lode this afternoon right back to the cross-cut. We hauled up one stone of the weight of more than 3 cwts. of black ore, tin, and mundle; we have something good here I think.

— Thos. Taylor, June 4: We are still engaged tramming from the run, where there is a deal more soft killas in the stuff, which I think is breaking away from the footwall, and very likely a portion of the lode is standing; at times large stones of black ore, mundle, and tin fall down; but the water is now running through, therefore we hope to be able to secure it shortly; if not, we must run down a little grass-shaft on it; I think from the quantity of stuff taken away it must be very near the surface.

ROARING WATER.—Henry Thomas, June 2: The rock in the 45 cross-cut north is composed of civan, brown quartz, and killas. Powerful jets of water are proceeding from the breast and back of the end, and, consequently, very little progress can be made. Every branch of spar is dipping north through the civan, which I expect are leading towards Grady's lode. In the cross-cut south we have passed through the caunter, being north-cast and south-west. The caunter is about I ft. wide, composed of flookan, friable quartz, mundic, and a little yellow ore. By driving 4 or 5 ft. cast the caunter and east and west branch, containing strong yellow copper ore, will fall together, and when a junction takes place it is very probable an improvement will ensue.

ROSECLIFF AND TOLCARNE.—R. Proyr. T. Gundry, June 2: The ground in the 50 cast, towards the old mine, is very wet and spare for driving, and the end letting out a large stream of water, which is coming from the old mine. The lode in the rise in back of this level, on No. 4 lode, are engaged at present in taking up the water which is coming from the 10 and 15 fm. levels, east of the old engine-shaft; when this is accomplished we think we shall be able to resume the driv

in taking up the water which is coming from the 10 and 15 im, ievers, case or the old engine-shaft; when this is accomplished we think we shall be able to resume the driving of the 30 fm. level, east of the old engine-shaft, in the New Wheal Rose sett.

ROSEWARNS (CSOLS.—J. Namearrow, R. Kinnekey, June !: Starah's shaft ROSEWARNS (CSOLS.—J. Namearrow, R. Kinnekey, June !: Starah's shaft ROSEWARNS (CSOLS.—J. Namearrow, R. Kinnekey, June !: Starah's shaft ROSEWARNS (CSOLS.—J. Namearrow, R. Kinnekey, June !: Starah's shaft Is down to the sold in the shaft of the winze, below the 30, where we are also sinking, and the lode is worth 162, per fathom. There are now four pitches working and the 170 has greatly improved, and the appearance of the lode also; we expect this end will in a short time entirely drain all the other workings on the caunter. The mine is steadily improving.

SORTRIDGE CONSOLS.—James Richards, Jame 4: Hitchins's shaft is down between 10 and 11 fms, below the 104, and the ground continuing easy good progress is being made. In the 140 cast the lode is of fair size, 2's ft. wide, and being composed of mundic, quartz, prian and good stones of ore is promising.

The CTH LICENTER.—J. Boundy, W. B. Boundy, May lode is 3 ft. wide, containing and containin

west Principor we have some stones in the south engine-shaft containing beautiful spots of yellow copper or; the ground is very soft, and requires to be very close timbered. I have no doubt that if the ground becomes firmer we shall have a good lode. No other change to notice.

WEST ST. IVES.—J. Evans, T. Uren, May 21: The end now driving in the cast and west lode, west of the cross-course, for the last 3 fms. especially, and ecidedly improved, being worth for the and copper 8t, per fm., and costing, only 4t, per fm. to drive, with an improved appearance. We would observe that we are nearing the junction of the granite and killas, at the junction of which great riches were found in the adjoining mine, St. Ives Consols. We recommend the prosecution of this point with all dispatch. And with reference to further operations, we recommend pushing forward to the large tin lode which is seen at the foot of the cliff, and which appears to give great promise of success.

— T. Uren, May 27: The east and west lode continues to look well, and is very productive for copper. A branch has dropped into this lode to-day on the footwall, which has greatly improved it. As the driving proceeds the lode gives every indication of yielding abundance of mineral.

WEST TOLGUS.—June 3: Taylor's sumpmen are getting on very well with sinking Taylor's engine-shaft below the 95 fm. level, cutting trip-plat, &c. The lode in the 95 fm. level east is quite as good as when reported last week, being over 6 ft. wide, producing 5 tons of ore per fm., worth 301, per fm. The lode in the 55 fm. level cast is quite as good as when reported last week, being over 6 ft. wide, producing 5 tons of ore per fm., worth 501, per fm. The lode in the 55 fm. level west is 18 in. wide, unproductive. In the 55 fm. level east is quite as good as when reported in the work in the second of the second of

per fathom, and 9s, in 11.; in each place the lode will average at least 8l. per fathom. We are busy dressing, and we hope to sell a good parcel of tin on the

per fathom, and 9s, in 11.; in each place the lode will average at least 81. per fathom. We are busy dressing, and we hope to sell a good parcel of the on the 16th of Jane.

WHEAL GRENVILLE,—G. R. Odgers, W. Bennetts, June 4: Everything is progressing very satisfactionity at this mine, but we cannot see any change to report since our setting report for Saturday.

W. Polkinshorne, May 20: In the stamps.—Pryor's Lode: We have commenced shiking the new shaft below the stamps.—Pryor's Lode: We have commenced shiking the new shaft below the stamps.—Pryor's Lode: We have commenced shiking the new shaft below the stamps.—Pryor's Lode: We have commenced shiking the new shaft below the stamps.—Pryor's Lode: We have commenced of retaining which warrant its vigorous prosecution. We have also commenced driving both east and west on the course of the lode at the 94 fm. level, where it is worth for tin full 40f, per fathom; the ground is at present bard and spare for driving. In the 82, driving west of new shaft, the lode is much the spare for driving. In the 82, driving west of new shaft, the lode is much the stamp of the shaft, the lode is worth for it in 81, per fathom.—It is per fathom.—It is yelding a little tin, but not to value.—Cannter Lode: In the 82, driving north of shaft, the lode is 2 ft. wide, and worth for tin 81, per fathom.—Vottle Lode: In the 24, driving east of cross-cut, the lode has improved in appearance, and yielding good work for tin.

WHEAL KITTY (Uny Lelant).—William Rosewarne, June 4: South Russoe Lode: The Lode: In the 12d, driving and for the shaft (be beundary shaft, shiking below the 40, is worth for the worth 3d, the per fathom.—The lode in the 16d, east of Bolitho's winze, shiking below the 14d, is very 14d, 18d, per fathom.—The lode in the 16d, east of Bolitho's winze, shiking below the 14d, is very 14d, 18d, per fathom.—The lode in the 16d, east of Bolitho's winze, is worth 6d, per fathom. The lode in the 16d, east of Bolitho's winze, is worth 6d, per fathom. The lode in the 16d, east of Bo

#### [ADVERTISEMENTS.]

[ADVERTISEMENTS.]

From Mr. Edward Cooke:—The continued decline in the standard for copper ore is very discouraging to holders of shares in copper mines, and must tend eventually (unless a reaction takes place) to scriously affect the interests of Cornwall, so far as copper mining is concerned. It is with no recling the control of the From Mr. EDWARD COOKE :- The continued decline in the standard

west they have sunk Bounder shaft 17 fathoms from surface, on a productive tin lode, and are now driving a level east and west, the lode producing good quality tin. This shaft will be sunk speedly to the 35, and without any machinery, the adit level being some 35 to 40 fms. deep. It is in contemplation to increase the number of shares to (say) 5606 at the next meeting, to be held about the end to July. The mine is at present in 100 shares, dues 1-20th.—West Great Work. The different operations continue quite as productive as for some time past. It is expected the saic of tin this week will realise about 500t, the largest they have ever had for one month. They have a large extent of ground laid open now, and, therefore, more tributes at low rates were set last week.

NORTH CROFTY.—The 170, west of Petherick's shaft, is worth 10t, per fathom; the 185, worth 6t, the 196 improved, worth 7t. per fathom. Petherick's shaft is down 4 fathoms below the 196. The 208, cast and west of engine-shaft, progressing well. Praced's shaft, sinking below the 196, is down 3ft, this is 70 fms. east of engine-shaft. The lode is of no value still in the 196 and 183, east of Praced's shaft, but an improvement ere long is pretty certain in the 196 east, as a splendid lode was passed through and over in the 183 east, which level is some 30 fathoms ahead of the 196 fm. level end cast. In the 120, east of Rule's shaft, in the eastern part of the mine, a cross-cut is being driven north to intersect the main part of the lode, which is susposed to be ahead, as water is coming out freely; this part upward was exceedingly rich for copper ore, and this is the mineral they are in search of in the 120 east. They sold on June 32 parcel of black tin to the Mellanear Company—14 tons 19 cwts. 2 qrs. 2 lbs., at 584, 2s. 6d.—870, 9s. 4d.

8701.98.4d.

At EAST SETON, which adjoins Emily Henrietta, they are making fair progress in sinking the engine-shaft. It is expected the lode will be met with at the 29, below adit, by the end of this month.

#### Projected New Companies.

W. O				
Company.	Capital.	Shares.	. 1	Each.
Huasco Railway	£100,000	 10,000		£ 10
Patent Metallic Air-Tight Coffin	1,000	 100		10
Darenth Vale Gas	10,000	 1,000		10
Cannock Market Hall	2,000	 2,000		1
Langley Mill and Heanor Gas Light and Coke	5,000	 1,000		
Cornwall Slate Slab	30,000	 10,000		3
Queen of England Fire & Life Insurance & Loan	25,000	 10,000		21/4
Widnes Metal	20,000	 200		
Abraham Lord and Co	9,600	 48		200
Wallsend Cement	30,000	600		50
Hallsham Cattle Market	2,000			
Britannia Life Assurance and Investment		100,000		
Yeavil Gas and Coke	3,500	140		25

CORNWALL SLATE SLAB COMPANY, 30,000%, in 10,000 shares, of

CORNWALL SLATE SLAB COMPANY, 30,000L, in 10,000 shares, of \$1, each.—The objects for which this company is established are to purchase and work certain slate slab quarries on Besay Common, parish of \$5. Juliet, Cornwall; and the doing all such things as are conducive to the above objects; and the conversion into money of the produce of such quarries. The Memorandum Issigned by—Colonel Bowland Moffatt, Kennington-park-road, 1; E. Barry Jupp, Carpenter's Hall, London-wall, 1; William D. Harvey, Notting-hill Square, Bayswater, 1; George Mills, Old Jewry, 1; J. H. Howard, Quality-court, Chancery-lane, solicitor, 1; Francis Housman, New-square, Lincolis Inn, 1; William Evans, Frederick's-place, Old Jewry, E.C., 1. The number of directors is to be not less than three nor to exceed six. Qualification, 50 shares of 100L each.—The objects for which this company is established are for working the burnt ore obtained from cuproous pyrites, for acquiring certain premises at Widnes, and in any other parts of the kingdom which may be found convenion or destrable; and the construction and maintenance of works, manufactories, and conveniences, and for carrying on at Widness, and such other places, the business of metal extractors, smelters of and dealers in ores, minerals, and metals, and the above objects. The Memorandum is signed by—Edmund Knowless Musphart, 41, Old Hall-street, Liverpool, alkali manufacturer, 15; J. W. Lukis, Woodlands, Isleworth, 5; F. Clauder, Coleman-street, London, assayer, 15; Richard Morris, Doncaster, merchant, 5; J. Artiur Phillips, Earl's-cornitoring of the sum of 10th shall be paid by each member on application for shares, and the sum of 10th on the company, increase its capital by the besue of new shares, such increase to be of such amounts, or a policy of the incorporation of the company. The directors in the late of the incorporation of the company, increase its capital by the besue of new shares, and the sum of 10th on the company, increase its capital by the besue of new shares, and in qualifi

while he continues manager.

Assam Petroleum Company, 50,000L, in 5000 shares, of 10L each.

—The objects for which the company is established are the acquisition, by purchase from F. A. Goodenough, of Calcutta, and other persons jointly interested with him, of the licence and rights granted to him by the Government of Bengal, to hore for, raise, and refine petroleum at Upper Assam, and all other rights and interests granted to the said F. A. Goodenough; and the selling, dealing in and disposing of such petroleum in the ordinary way of trade, &c.; and the purchasing, renting, taking on lease, or otherwise obtaining or acquiring, for any of the purposes aforesaid, any lands, hereditaments, machinery, &c., which may be necessary or convenient for carrying on such trades. The Memorandum is signed by—Herry Duckworrii, 5, Cook-street, Liverpool, merchant, 25; F. Addington Goodenough. Chilbolton Rectory, near Stockbridge, merchant, 25; W. H. Goodenough, Mixbury House, Eastbourne, Sussex, merchant, 25; J. Carrington Spalmen, Mixbury House, Eastbourne, Sussex, merchant, 25; J. Carrington, 20 shares. The Boltons, West Brompton, London, merchant, 25; J. W. PLATT, Salford Ironworks, Manchester, manufacturing engineer, 25; R. Duckworth, Cook-street, Liverpool, now residing at the Grand Hotel, Parls, 25. The number of directors is not to be less than three, nor more than six. Qualification, 20 shares. The first directors are to be J. C. PALMER, H. Duckworth, and W. Mashier, Jun. For remuneration the sum of 12t. shall be provided for each meeting of directors, and shall be divided amongst those who may attend. The managing agents shall, when vacancies occur, be chosen by the shareholders in general meeting, The first managing agents in India shall be J. C. PALMER, H. Duckworth, and Co. The remuneration of the managing agents in England shall be Mixled amongst in India shall be a commission does not exceed the first managing agents in England shall be William Nichol, Duckworth, and Co. The remuneration of the managing agents tile he continues manager. Assam Petroleum Company, 50,000%, in 5000 shares, of 10% each

CORNWALL HEMATITE COMPANY,—This undertaking, to which reference has previously been made in the Journal, is declared to be a success, the first allotment of shares having been made, and a cargo of the hematite ironstone having already been shipped to one of the largest and most substantial firms in the North of England, who promise a further order for 20,000 tons (quality being equal to sample), at a price which will leave a good profit. The company are prepared to undertake the delivery of this quantity within 12 months, so that shareholders may look forward to profitable returns on their investments. The entire requisite amount of capital will not exceed 7500%. The company propose to open up a most valuable and important branch of industry in Cornwall, and will afford much additional employment for labour, as the hematite ironstone of that county, although ployment for labour, as the hematite ironstone of that county, although rich in metallic properties, and otherwise valuable to the smelter, has been allowed to remain dormant until the continued depression in the price of copper and tin caused the suspension of many of those mining undertakings, and forced attention to its development. With convenient shipping facilities to all parts, there is no reason why Cornish hematite may not compete with that of Cumberland. The company are well entitled to success in the efforts now being made

CAPITAL AND LABOUR-CAN THEY CO-OPERATE?-This important CAPITAL AND LABOUR—CAN THEY CO-OPERATE?—This important question is answered in a startling manner in the "Scientific Review" for June. That logicians and mathematicians would object to the argument can matter little, provided it be legally and commercially conclusive. It is attempted to demonstrate that a manufacturer whose capital in stock, plant, &c., is of the estimated value of 6000l., the profits thereon 600l. per annum, or 10 per cent., and who pays 3000l. a year in wages, can, by the mere adoption of the co-operative principle. Wages himself in a resistion to pay 30 per cent higher wages. 3000% a year in wages, can, by the mere adoption of the co-operative principle, place himself in a position to pay 30 per cent. higher wages to his workmen, and obtain 13 per cent. instead of 10 per cent. for himself; or, in other words, that he can, with the advantages of the co-operative system, so divide the 600%, profit that out of it the workmen shall receive 900%, and himself 780%. The benefits of co-operation have never before been put forward in so favourable a light, nor has it ever before been so satisfactorily proved that by means of co-operation the "loaves and fishes" can be so admirably manipulated, even in modern times.

A petition for winding up the Imperial Silver Quarries Company (Limited) is to be heard before Vice-Chancellor Malins on Friday.

#### The Mining Market; Prices of Metals, Gres, &c.

METAL MARKET-LONDON, JUNE 5, 1868.

COPPER. & s. d. & s. d.	IRON.   Per ton.
Sheetsper lb. 9d10d. Wire, 8½d9½d. Tubes, 10½d11d.	Do. mrch. Tyne or Tees 6 10 0 Do., railway, in Wales 5 10 0- 5 15 0 Do., Swed. in London. 10 0 0 To arrive
Yellow Metal Sheath.p. lb. 7½d8d. Sheets, 7 d7½d. SPELTER. Per ton.	To arrive
Foreign on the spot. £20 12 6- to arrive 20 12 6-	Railway chairs 5 10 0-5 15 0 ,, spikes11 0 0-12 0 0 Indian Charcoal Pigs,
In sheets £26 0 0- —	in London, p. ton 7 0 0- 7 10 0 STEEL. Per ton.
English blocks 96 0 0 Do., bars (in barrels) 97 0 0 Do., refined 98 0 0 Banca 94 0 0 Straits 91 10 0	Swed., in kegs(rolled)14 5 0 ,,, (hammered)14 15 0-15 0 0 Ditto, in faggots16 0 0 English, spring17 0 0-23 0 0 QUICKSLIVER (p. bottle) 6 17 0
TIN-PLATES.* Per box.  IC Charcoal, 1st qua. 1 6 0-1 8 0	LEAD. Per ton. English Pig, com19 7 6-
IX Ditto, 1st quality 1 12 0- 1 14 0 IC Ditto, 2d quality. 1 4 0- 1 5 0 IX Ditto, 2d quality. 1 10 0- 1 11 0 IC Coke	Ditto, LB

0 Ditto, white ......27 0 0-30 0 Ditto, patent shot...22 10 0-22 15 Spanish.......18 10 0-

REMARKS.—The Metal Market continues to evince a moderate de-REMARKS.—The Metal Market continues to evince a moderate degree of activity, and although it may not be quite so satisfactory in some respects as would be desirable, yet there is a most decided advance upon the condition in which it had previously been for so many months. Orders are now coming in pretty freely, and though they may not be quite so extensive as in former days, yet they are certainly very numerous, which clearly proves that business is in a much more lively condition, and we may, consequently fairly anticipate more lively condition, and we may, consequently, fairly anticipate that they will be found ere long to increase in size as well as in num-ber. It is pleasing to find that business of a really legitimate chaber. It is pleasing to find that business of a really legitimate character is thus increasing, as this is much more likely to be stable and lasting than if the improvement resulted from transactions of a purely speculative nature, which, however they may be calculated to give an impetus to the market for a time, are almost sure eventually to cause a relapse, and to produce at last a depression in trade, which takes some time to overcome, while really legitimate business caused by a genuine demand establishes a firmness and solidity in trade which may be expected to be lasting and permanent. The money market still continues remarkably easy, and there does not appear any diminution of the amount of capital waiting for investment, even at rates below that of the Bank minimum. This state of monetary a ffairs ought, therefore greatly to facilitate the improved appear any diminution of the amount of capital waiting for investment, even at rates below that of the Bank minimum. This state of monetary affairs ought, therefore, greatly to facilitate the improved condition of trade, and to aid in bringing a speedy return to vigour and prosperity in all branches of commerce.

COPPER.—No important transactions have occurred in this metal during the week, which has consequently remained very quiet, and prices have undergone no change.

IRON.—In Staffordshire little work has been done during the week, in consequence of the Whitsuntide holidays. There is still a very good demand existing, but the strike of the puddlers, which still good demand existing, but the strike of the puddlers, which still remains in far from a satisfactory state, very much interferes with business, and causes considerable inconvenience, in consequence of the uncertainty as to time of delivery. In Welsh one or two of the leading works are somewhat better employed, the shipments of rails to the United States, and several other foreign markets, having increased. Russian advices are considered favourable, but there is not a large business yet doing with that country. The purchases on account of the other continental markets are comparatively small. Home transactions are slowly increasing, both in number and quantity, but there is still a lack of anything like vitality in that branch of the trade. Several of the railway companies are in the market with rail contracts. For Swedish iron a moderate demand now exists, prices are, however, a trifle easier. In Scotch pig-iron at the commencement of the week the market was a little better, and 52s. 10d. cash was the price obtained, it afterwards, however, declined to cash was the price obtained, it afterwards, however, declined to 51s. 7d. cash, and at the close of the week rallied to 52s. cash.

LEAD.—A rather better enquiry has existed, and a moderate busi-

LEAD.—A rather better enquiry has existed, and a moderate business has been done; prices, however, are somewhat easier.

TIN.—On Thursday the smelters of English announced a decline of 2l. on common, and 3l. on refined, making present prices 96l. for blocks, 97l. for bars, and 98l. for refined. For foreign the market has remained quiet, and business has been done in Straits at 92l. and more recently at 91l. 10s. cash. In Holland the stock of Banca in warrants on May 31 was 106,472 slabs, against 154,472 slabs same time last year, and the arrivals towards next sale 62,921 slabs, against 46,114 slabs same time last year. The quantity of Straits afloat for Europe is 1015 tons, against 1789 tons same time last year.

SPELTER.—The market has become rather firmer; and, though at the commencement of the week parcels on the spot were sold at

SPELTER.—The intrice has become rather armer; and, though at the commencement of the week parcels on the spot were sold at 20t. 10s., yet more recently business has been done at 20t. 12s. 6d., at which holders are now firm. The stock in London on May 31 was 1102 tons, being a decrease of 28 tons during the month.

TIN-PLATES.—There is a rather better enquiry, with a moderate business days.

usiness doing.
STEEL AND QUICKSILVER.—No change requiring comment.

The MINING SHARE MARKET continues in a depressed state. There very little change to notice since our last, prices in many instances being merely nominal. The mines chiefly dealt in have been East Basset, Chontales, Prince of Wales, West Prince of Wales, Trelawny, Great Retallack, Grenville, West Chiverton, Redmoor, South Herodsfoot, Chiverton Moor, Frontino, and a few others. The standard for copper ore is up 1%. West Chiverton, 61 to 63 ex div.; at the meeting the accounts showed a profit on the quarter of 5964%. 15s. 2d., and a dividend of 2% per share (6000%) was declared, leaving 9024% 6s. 10d. in hand. The lead ore sold during the quarter realised 15,4082, 15s. 7d. The ends in the mine are valued in the aggregate at 3817, per fathom, and are discovering, according to the agent, 10,0002, of lead ore per month; the sales, therefore, might be considerably increased, as they ought to be, and the reserves still added to.

10,000% of lead ore per month; the sales, therefore, might be considerably increased, as they ought to be, and the reserves still added to. Chiverton Moor, 6\(^2\_8\) to 6\(^3\_6\); Chontales Gold, 1\(^3\_4\) to 2; Bedford United, 25s. to 30s.; Clifford Amalgamated, 5 to 5\(^4\_4\); Devon Great Consols, 445 to 455; Drake Walls, \(^1\_8\) to \(^3\_6\). East Basset shares have advanced to \(^3\_4\), 10. East Caradon shares have declined to 3\(^1\_4\), 3\(^3\_4\). East Lovell, 7\(^4\_4\) to 8; East Pool, 350 to 375; East Wheal Grenville, 34s. to 36s.; Frontino and Bolivia, 14s. 6d. to 15s. 6d.; Great Laxey, 16\(^1\_4\) to 17\(^1\_2\); Great North Downs, 3\(^1\_4\) to 4\(^1\_4\). Prince of Wales, 41s. to 43s.; the 65 east is in a very promising lode; the 55 east is worth 30% per fathom. The cross-course has been cut through in the 55 west; lode worth 10% per fathom, and improving. This is an important point. The last ore weighed off 138 tons, and the mine has sampled 136 tons more. West Prince of Wales shares have been in demand at 9s. to 11s.; there is an improvement, and a very promising lode in the south shaft. Chiverton Moor, 1\(^1\_4\) to 2\(^1\_6\); at the meeting a call of 5s. per share was made, the balance against the mine being 619%. 3s. 8d. The returns of ore for the quarter were 639%. 4s.; costs for same time, 1623%. 8s. 6d. These, the agents report, have been lessened, and they hope to keep them down. The 110, east of Cookney's, is worth 9cwts. hope to keep them down. The 110, east of Cookney's, is worth 9 cwts of silver-lead per fathom, and it is hoped will open out a good piece of stoping ground. The chief point, however, seems to be in cutting the caunter lode in the 78 cross-cut north, which will be met with soon.

the different lodes are valued in the aggregate at 51% per fm. for tin

the different lodes are valued in the aggregate at 51L per fm. for tin and copper, and in the tribute department the pitches are working on copper ore from 5s. to 13s. 4d., and from 5s. 6d. to 12s. in 1L for tin. At South Basset meeting a call of 2L per share was made. The loss on two months was 396L 17s. 2d., and a balance against the company of 1042L 1s. 6d. Teague's branch in the 75 is worth 1 ton of copper ore per fathom, and from this branch in the levels above large quantities of ore were raised in former workings. Great Retallack, 2½ to 2½; Great Wheal Vor, 15½ to 16; Herodsfoot, 37½ to 40; Maes-y-Safn, 25 to 27½; Marke Valley, 6½ to 6¾; North Wheal Crofty, 16 to 18, ex div.; at the meeting a dividend of 10s, per share was declared, leaving about 300L to the credit of the next account. The report of this mine is described as favourable. North Downs, 25s. to 27s. 6d.; North Roskear, 15 to 16; New Lovell, 29s. to 31s.; Emily Henrietta, 37½ to 40; North Treskerby, 18s. to 20s.; Providence Mines, 24 to 26; South Caradon, 390 to 400; South Frances, 17 to 19. South Herodsfoot shares have again become in demand, at 15s. to 20s.; the shaft is now close upon the 100, in very favourable ground for ore. Redmoor shares have advanced from 4s. to 6s.; Tincroft, 13½ to 14½; West Caradon, 4 to 4½; West Frances, 30 to 32½; West Seton, 195 to 205; Wheal Grenville, 32s. to 32s. 6d.; Wheal Margaret, 5½ to 6; Wheal Mary Ann, 22 to 23; Wheal Seton, 80 to 85; Wheal Trelawny, 9 to 10; Wheal Uny, 2 to 2½.

The Market for Mine Shares on the Stock Exchange has been very quiet during the week, and prices have not materially fluctuated. Brazilian gold mines have been in fair request. Don Pedro shares are a shade better, and close  $2\frac{1}{6}$  to  $2\frac{3}{6}$  prem., owing to the more favourable advices by the last mail. Rossa Grande shares are steady at  $\frac{1}{6}$  prem. Anglo shares have been dealt in to a fair extent. Del Rey \$\frac{1}{4}\$ prem. Anglo shares have been dealt in to a fair extent. Del Rey shares advanced in the early part of the week to 19\frac{1}{2}, but subsequently relapsed, and close flat, at 18\frac{1}{2}\$ to 19. Frontino shares are slightly better, at \frac{1}{2}\$ to \frac{3}{4}\$. Australian Mines are steady. Port Phillip shares are \frac{1}{2}\$ to \frac{3}{4}\$ prem., and are favourably thought of. Yudanamutana shares have slightly declined, and close 1\frac{3}{4}\$ to 1\frac{3}{4}\$ pre share. Australian Copper shares unchanged in price. Italian mines are fairly represented. Pestarena shares are \frac{3}{4}\$ to \frac{3}{4}\$ dis. Val Antigoria, \frac{3}{4}\$ to \frac{3}{4}\$ dis. Spanish mines are enquired for. Linares, 2 to 2\frac{1}{2}\$; Fortuna, 1\frac{1}{4}\$ to 2. British mines are fairly represented, but the business actually transacted is only on a restricted scale. West Chiverton, 61 to 63 ex div. The reserves in this mine are being steadily augmented tually transacted is only on a restricted scale. West Chiverton, 61 to 63, ex div. The reserves in this mine are being steadily augmented at the ratio of about 5000!, per month. Chiverton Moor shares are quoted 6 to 6½. Chiverton, 2 to 2½, with points of very great promise. Devon Great Consols shares are now quoted 445 to 450. East Caradon shares are flat, at 3½ to 4; Great Laxey shares have been more offered, at 16½ to 17; North Roskear shares have risen to 14.15. New Loyal holds out good promise to make a mine. Cald. 14, 15; North Rosker shares have risen to 14, 15; Now Lovell holds out good promise to make a mine. Caldbeck Fells, 12s. to 13s.; the reports from this mine augur well for the future; the returns are good, and the mine, it is said, is being honestly worked. Marke Valley, 6\frac{3}{2} to 7; North Crofty, 1\frac{7}{2} to 2; Prince of Wales shares have been dealt in, to some extent, at 41s, 6d, to 42s, 6d.; Trelawny and Mary Ann shares enquired for; Minera, 165 to 170; Glan Alun, 6s, 6d. to 7s, 6d.

A cost-book company, divided into 6000 shares, has been constituted for carrying on the operations at Wheal Emily. The mine will henceforth be called Wheal Saint Vincent. It appears that a lease of the sett was granted to Mr. Henry Wills, who has been appointed secretary of the new company, on May 19. The shareholders in Wheal Emily are to receive share for share in the Wheal Saint Vincent; and, as men have already been set to work in the mine, it is believed that no further delay will take place. Mr. Davies has been appointed consulting engineer, and Captain R. Victor resident agent. The prospectus, with history of the mine, will be advertised in next week's Journal.

The West of France Rock Salt Company has been formed, with a capital of 120,000l., in shares of 20l. each, for the purpose of working a recently-discovered deposit of rock-salt near Dax, in the West of France. The concession covers an area of about \$\frac{1}{2}\$ square miles, and is held in perpetuity from the Imperial Government, at a nominal rent of about \$\frac{1}{2}\$, per annum. The purchase-money for the concession has been fixed at \$36,000l., one-half of which is to be paid in cash, and the remainder in fully-paid shares, not entitled to dividend until 10 per cent. per annum has been paid upon the ordinary shares, after the dividends upon the ordinary shares have averaged 10 per cent. per annum from the commencement of the manufacture and sale of salt by the company, and for not less than three years, all distinction between vendor's and ordinary shares is to cease. The deposit of salt lies at a depth of from 100 feet to 150 feet from surface; and it is proposed to erect works adapted to turn out \$30,000 tons per annum, and capable of further extension as demand increases. The profit upon 30,000 tons per annum is estimated at from \$2,600l. to 27,000l., assuming the price to remain as at present—20s. \$\frac{9}{4}\text{d. for sea-salt}\$ The WEST OF FRANCE ROCK SALT COMPANY has been formed, with assuming the price to remain as at present—20s. 9½d. for sea-salt—and the cost price of the Dax salt to be 5s. 8d. The fuel to be used is a "lignite coal," found in the neighbourhood, and estimated to cost 6s. 8d. per ton. After payment of the 36,000% for the concession, and 64,000% for the land and works necessary to give it a value, 20,000% will remain for floating capital, which amount will, it is considered, be ample.

The directors of the SAO VICENTE MINING COMPANY have convened the first general meeting for June 26. The share certificates will be ready in exchange for the letters of allotment and banker's eceipts on June 16.

receipts on June 16. 
At Camborne Ticketing, on Thursday, 3164 tons of ore were sold, realising 12,2561. 18s. 6d. The particulars of the sale were :—Average standard, 1121. 19s.; average produce,  $5\frac{\pi}{6}$ ; average price per ton, 31.18s.; quantity of fine copper, 185 tons 16 ewts. The following are the particulars of the sales during the past month:—Date. Tons. Standard. Produce. Per ton. Per unit. Ore copper. May 7. 2063 £110 13 0 ... 678 ... £4 16 0 ... 14s. 1d. £70 8 0 ... 141 1719 ... 112 5 0 ... 648 ... 4 9 6 ... 13 1046 ... 69 8 0 ... 21 ... 3922 ... 113 0 0 ... 644 ... 4 6 0 ... 13 1046 ... 69 8 0 ... 28 ... 2380 ... 107 7 0 ... 634 ... 4 14 0 ... 13 5 ... 65 19 0 Compared with last week's sale, the advance has been in the standard 14, and in the price per ton of ore about 1s. 2d. Compared with 11., and in the price per ton of ore about 1s. 2d. Compared with the corresponding sale of last month, the decline has been in the standard 2l. 9s., and in the price per ton of ore about 3s.

At West Chiverton Mine meeting, on May 29, the accounts for the three months ending March showed a credit balance of 15,024.6s. 1ed. A dividend of 6000l. (2l. per share) was declared, leaving 9024l.6s. 1ed. to credit of next account. Capts. Jas. Juleff, R. Nancarrow, and Wm. Nicholis say—"The stopes in the different parts are opening out exceedingly well, and we are very much pleased in being able to inform the proprietors of this valuable mining property that it is quite equal to our former reports, and there is every prospey of a long continuation."

At Wheal Basset meeting, on Tuesday, a profit was shown on the common of 5141. A dividend was declared of 5121. (11, per share).

two months of 5141. A dividend was declared of 5124, (14. per share).

At South Wheal Crofty Mine meeting, on Monday, the accounts for four months ending April showed a profit of 7321. 18s. 7d. A dividend of 4681, 10s. (10s. per share) was declared. Capts. F. Gilbert and Simon Toy say—"We consider our prospects quite equal to what they were at the last account. Number of men on tutwork, 74; ditto boys, 14; tributors, 50. Average tribute, 8s. 6d." Mr. Edward Hearle Rodd, the purser, saya—"The opening of additional ground and the further development of the mine has increased our costs, and, 1 am happy to say, correspondingly our returns. The profit made during the last four months is 7854, 5s. 8d., against 421. 17s. 1d. at our last account. The ores sold during the last four months have improved in quality, but we unfortunately have had to contend with a failing standard, which I regret to say still continues. How far our next account will be prejudiced by this continued depression will remain to be seen. There are no outstanding bills not charged, and the costs are brought up to the present time as close as possible. I shall continue to carry out the mine with every economy consistent with its efficient development, and congratulate the adventurers that, after a period of considerable duration and suspense, I am enabled to show the accounts with the present favourable results."

At Tincroft Mine meeting, on May 29 (Capt. Wm. Teague in the

At Tincroft Mine meeting, on May 29 (Capt. Wm. Teague in the chair), the accounts showed a credit balance of 15661. 18s. 8d. The profit on the three months' working was 16601. 15s. 5d. A dividend of 15001. (5s. per share) was declared, leaving a credit balance of 661, 16s. 8d. The report stated that four months' cost were charged against three months' returns, and the mine continues to look well.

of silver-lead per fathom, and it is hoped will open out a good piece of stoping ground. The chief point, however, seems to be in cutting the caunter lode in the 78 cross-cut north, which will be met with soon.

Wheal Basset, 62½ to 67½; at the meeting, on Tuesday, a dividend of 11. per share (5121.) was declared, leaving 191. 12s. 5d. in hand.

The profit on two months' working was 5141, 12s, 5d. The ends on

At Great Caradon Mine meeting, on Tuesday (Mr. H. G. Sharp in e chair), the accounts showed a debit balance of 1061, 18s. 6d. A call of 2s. per

the chair), the accounts showed a debit balance of 1061. 18s. 6d. A call of 2s. per share was made.

At the Carn Brea Mines meeting, on May 12 (Mr. L. Vigurs in the chair), the accounts for the year ending Dec. 31 showed a loss on the 12 mouths' working of 17451. 17s. 8d. A call of 2l. per share was made. Capts. Daw. James, Miners, and Hosking reported upon the various points of operation. On Teague's lode the 165 is driven west of Rogers's shaft 12 fathoms; the lode is 8 ft. wide, worth 7l. per fm.; driving by six men, at 20l. per fathom. This lode has been largely productive at a former period, and they believe will again prove so at a greater depth, as soveral lodes bying to the south, and dipping towards this lode, smill at a deeper level form a junction with Teague's lode, and no doubt greatly increase its value. In the tribute department throughout the mine they have 40 pitches, working by 123 men, at tributes varying from 4s. to 12s. in 1l. It is satisfactory to find that although the balance-sheet for last year shows the loss from the agents' report, is likely to increase, so that the return of the mine to the list of dividend-paying mines, in which for more than 20 years it held a position, may be looked forward to.

At the South Condurrow Mine meeting, on Thursday (Mr. Buckland in the chair), the accounts showed a debit balance of 326l. is. 3d. A call of 3s. per share was made. Details in another column.

At South Basset Mine meeting, on Tuesday, the accounts showed a debit balance of 30l. 6s. 10d. Details elsewhere. At the General Mining Company for Ireland meeting, on Monday (Mr. General Mining Company extraor-diancy separal meeting, on Wednesday (Mr. Ogilvie in the chair), the accounts showed a debit balance of 50l. 6s. 10d. Details elsewhere. At the General Mining Company for Ireland meeting, on Monday (Alderman Redmond Carroll in the chair), the accounts showed a debit balance of 50l. 6s. 10d. Details elsewhere. At the General Mining Company for Ireland meeting, on Monday (Alderman Redmond Carrol

reports were unanimously adopted. Decaris in another contain.

At the Don Pedro North del Rey Gold Mining Company extraor dinary general meeting, on Monday (Mr. Henry Haymen in the chair), an interim dividend of 1s. 6d. per share, for the three months ending March 31, was declared, being at the rate of upwards of 42 per cent. per annum, and the sum of 1823, was carried forward for the quarter ending June 30. Details elsewhere.

The Bank of England return for the week ending on Wednesday The Bank of England return for the week ending on Wednesday evening shows in the ISSUE DEPARTMENT an increase in the "notes issued" of 751,8751, which is represented by a corresponding increase in the coin and buillon on the other side of the account. In the BANKING DEPARTMENT there is shown a decrease in the "other deposits" of 92,8081, in the "seven day and other bills" of 2625L; and in the "rest" of 45,045L; together, 140,478L; and an increase in the "public deposits" of 293,588L—153,110L, from which must be deducted 19,814L; the increase in the "other securities," on the asset side of the account, leaving an increase in the total reserve of 133,296L

The shares of the Cornwall Hematite Company (Limited) are quoted

at from 1 to 1½ premium.

On the Stock Exchange the following prices were officially recorded during the week in British Mining Shares:—Great Laxey, 17; East Basset, 10½; North Wheal Crofty, 1½; Wheal Trelawny, 9, 9½; Tincroft, 14; West Chiverton, 62½, 61. In Colonial Mining Shares the prices were:—Cape, 12¾, 13¾, 13½; Scottish Australian, 15-16ths, 1-16ths; Yudanamutana, 1 15-16ths, 1½, 1¼, 1π Foreign Mining Shares the prices were:—St. John del Rey, 18½, 19½, 18½, 18½; Chontales, 1½, 2, 1¾, 1 15-16ths, 1¼; Don Pedro North del Rey, 2 15-16ths, 2 3-16ths, 2½ premium; United Mexican, 1½, 19-16ths; Anglo-Brazilion 11.16ths: Rossa Grande, ½ prem; Frontino and Bolivia, ½. zilian, 11-16ths; Rossa Grande, 4 prem.; Frontino and Bolivia, 8.

COAL MARKET.—The market has been moderately supplied this week, 117 ship only having come forward. Business has been active, and we quote an advance in house coals of 6d, per ton. Hartley's and we quote an advance in noise coals of 6d, per ton. Hartley's in steady request, at fully previous value. Hetton Wallsend, 18s. 6d per ton; Haswell Wallsend, 17s. 9d.; Tees Wallsend, 17s. 6d.; Eden Main, 15s. 9d.; New Belmont Wallsend, 15s. 3d.; Tunstall Wallsend, 15s. 3d.. Unsold 9 cargoes; 40 ships at sea.

#### THE COPPER TRADE.

THE COPPER TRADE.

Messrs. J. Pitcairn-Campbell and Co. (Liverpool, May 30) write—
The copper market forms no exception to the general dulness which, in spite of all the ordinary elements of prosperity now existing, prevails in almost all branches of the trade. Cheap money, magnificent harvest prospects, and no political complication to disturb, might be considered sufficient justification for markets being buoyant instead of the reverse, and more particularly in the above article where prices are below an average and statistics very favourable. An important feature in the transactions of the past fornight is the purchase of 2000 tons Chill ingots by English and French smelters. As mentioned in our last, this particular shape of copper had become a difficulty to the market, and it is fortunate that importers and smelters have seen fit to deal with it. No doubt the former will endorse to the Chill smelter the opinions we expressed in regard to the expediency of discontinuing the manufacture, as the correctness of the view is more and more confirmed every day. The Swansea standard at the sale on May 26 declined 30s., the average unitage being 16s. 1½d., but this is not to be wondered at, as the price of the raw material has been out of proportion high to that of copper. Below we give the estimated stocks in Liverpool and Swansea, and we estimate that alloat and chartered for up to last advices from the West Coast, S. A., there are 8930 tons pure copper against 13,115 during the same period last year. Quotations are for Chill ore and regulus, 15s. 3d. to 15s. 6d.; Barilla, 16s.; bars, 75t. 10s. to 76t.; ingots, 78t. to 78t. 10s. Business transacted during the fortuight comprises on the spot here—573 tons bars, at 76t. 10s. to 76t. 10s; 22t.6 ligots on private terms; and to arrive, 100 tons bars, at 76t. 10s. to 76t. [not. 775] per cent.; average preduce, 175g per cent.; average preduc

Total ..... 1692 1572 4534 1368 538 esenting about 7300 tons fine copper, against 8200 tons fine copper May 30, 11,100 tons fine copper, May 30, 1866; and 7600 tons, May 30, 1865.

THE COPPER TRADE.—Messrs. Vivian, Younger, and Boad (June 5) write—There has been almost a dearth of business this week in West Coast produce, the only transaction of any moment recorded being 600 tons of regulus to arrive at Swansea, at 15s. 3d. per unit. This is an exceptionally low price, but it is understood to have been made under exceptional circumstances, and it does not serve as an indication that there are any other soliers at the same figure. In bars no transactions have occurred; quotations, however, remain the same as last week. English raw copper has been in very limited demand, and fine foreign must be quoted a trifle lower. Nevertheless, the market appears to be very sound, and a vory small demand on the part of consumers would produce an advance, especially coupled with continually reducing shipments from Chili, and gradual absorption of stocks here, both of which causes are now in operation.

THE TIN TRADE.—Mr. L. Th. van Houten (Rotterdam, May 30) writes—In the beginning of the month the market for Banca tin opened very strong with buyers at 56 fl., but the uncertainty regarding the 40,000 slabs withdrawn in the public sale of March 31 created some depression, and holders became rather auxious to sell, and the price dropped to 54½ fl., which is the closing quotation. Some lots of Billiton tin changed hands in the course of the month at from 54½ fl. to 54 fl. to 145 f

Total .. Tons 471 .... 254 .... 485 ..... 1194 .... 894 .... 1199 Total., Tons 471... 254... 485... 1194... 894... 1199

Messrs, Von Dadelszen and North (June 2) write—The market was quiet during the month, and the trade acted cautiously. The arrival of several ships, both from Singapore and Penang, bringing altogether about 800 tons of tin, induced more anxiety to realise, and prices at once softened. The fall does not seem to have induced any more orders than we could have expected at the old prices. As every day now brings out parcels for realisation, the immediate future depends on the anxiety to soil. The statistical position of the article is not improved, although the delivery in Holland during May was about 400 tons, and here about 600 tons, showing that the requirements of consumers continue large. Our available stocks of Banca and Straits on the spot and to arrive now stand at 9969 tons, against 9784 tons last month, the unfavourable item being the quantity of Banca now aftoat—1454 tons, against 704 tons this time last month. The Dutch Company seem inclined to keep their 40,000 also until the autumn, as they have given no intimation of their wish to sell. The amount of supply at Penang, as well as Singapore, was moderate, and prices rather dearer. The result of the Dutch sale was not yet known there, so that we may look for higher prices for the next few mails, and then a decline again. In Cornwall the supply of ore has not been excessive, and smelters, consequently, have been firm holders. The quantity of the here and in Holland on May 30 was, compared with the three preceding years, as follows:—

1868. 1867. 1866. 1865.

Stock in Holland .106,372=3300 . 153,732=4320 . 124,529=3980 . 38,500=1230 Arrived for next sale 62,920=1950 . 46,114=1475 . 88,857=2850 . 173,916=5570 Billiton in Holland .7,827=240 . 470 . 470 . 600 . 3007 .

Total tons ...... 7247 9417 10,457 10,000
The quantity of tin now affoat for England is 1618 tons, against 1950 tons last year; to the Continent, 27 tons; and to America, 475 tons.

GAS.—At the British Association of Gas Managers annual meeting, on Tuesday, it was stated that upwards of 20 new appliances in the manufacture and distribution of gas were introduced last year. Amongst the foremost of them was the plan of using a mixture of small coal with shale oil, as a substitute for Cannel coal, for the production of gaslight of high illuminating power.

Chumas Qancock.—It is with deep regret that we announce the death of Mr. Thomas Hancock, who so worthily filled the post of managing director of the Yudanamutana Copper Mining Company of South Australia. He had suffered much during his brief illness, which terminated fatally on Thursday evening. By the death of Mr. Hancock the shareholders of the Yudanamutana Company have lost an esteemed and valued officer, and his loss will be much felt by the mining interest of South Australia. Mr. Hancock had been the means of introducing considerable capital into the colony for the development of her mines, and up to within the last few weeks had been energetically at work with other projects for facilitating the development of the mineral resources of South Australia by providing additional means for the transport of mineral to the coast for shipment to this country. In Mr. Hancock the colony possessed an earnest and hearty advocate of their interests, whilst those who were associated with him in England have ever regarded him as a warm friend, and a gentleman whose unswerving integrity might well be envied. Thomas Wancock .- It is with deep regret that we announce the

WANTED, FOUR THOUSAND POUNDS, upon SECURITY of an EXCELLENT COLONIAL COLLIERY.

Apply, with real name and address, to J. H. HOWARD, Esq., solicitor, 9, quality-court, Chancery-lane.

WANTED, a SITUATION as LAND and MINERAL SURVEYOR. Testimonials, &c., on application to "H. J.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO WORKING ENGINEERS.

WANTED, a WORKING ENGINEER. He will be required to work an HORIZONTAL ENGINE, and do general repairs. One he can cast and finish brasses preferred. An efficient man will be liberally rested. Address, stating particulars, C. H. B. HAMBLY, Mountsorrel, Loughborough.

RILLING AND BLASTING.—An experienced FOREMAN WANTED, to overlook twenty sets of drillers, in the MOUNTSORREL GRANITE QUARRIES. He will have to see to the firing of all holes, and the charge of a powder wearshes. charge of a powder magazine.

Apply by letter, stating age, qualifications, and wages required, to C. H. B. HAMBLY, Mountsorrel-road, Loughborough.

COLLIERY PARTNERSHIP.—A Gentleman having taken an extensive lease of some of the best HOUSE AND STEAM COALS IN NORTH WALES, is desirous of meeting with one or two Gentlemen to join him in OPENING OUT THE COLLIERY. Capital required, about £3000. A railway runs through the estate, and is situate in close prominity to markets where the coals are largely consumed. References exchanged. Full particulars by addressing "Z. Z.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

TO COLLIERY PROPRIETORS.—An experienced Traveller, now resident in Bristol, desires an ENGAGEMENT as AGENT or MANAGER. The Advertiser has represented a colliery, and has a CONNEXION AMONGST LARGE CONSUMERS AND BUYERS OF COAL. The highest testimonials and references can be given.—Address, "H.," 12, Somerset-square, Bristol.

TO PARENTS AND GUARDIANS.—A MINERAL SURVEYOR, practising in SOUTH WALES, is OPEN to take a WELL-EDUCATED YOUTH as ARTICLED PUPIL.

Apply to "F. G. S.," care of Messrs. Beer and Kenrick, Exchange buildings, Birmingham.

MARINE TELEGRAPHY (LAMING'S PATENT).—
A SHARE of this PATENT for RAPID SIGNALLING THROUGH LONG DISTANCES, of which the first three years are about to expire without opportunity for a trial, is OFFEED ON REASONABLE TERMS to any Gentleman with capital and energy to bring it fairly before the public. For information apply, in the first instance by letter, with real name and address, to J. E. SMITH, Esq., care of Mr. Laming, 10, Gloucester-place, Brighton.

JACK OR BLENDE.—TO BE GRANTED, the SETT of a JACK MINE. No payment on coming in. Thousands of tons have been sold, and thousands more remain. Apply to the proprietor, "A. B.," Post Office, Truro, Cornwall.

FOR SALE, the "MINING JOURNAL" from 1846 to 1867 inclusive (22 years), complete, and bound.
Apply to "B. B.," MINING JOURNAL Office, 26, Fleet-street, London.

FOR SALE, ONE HUNDRED WEST MARIA AND FORTESCUE SHARES. This mine adjoins Devon Great Consols.

Apply to Mr. HENRY PAWLE, 31, Throgmorton-street, London.

SOUTH DARREN.—FIFTY SHARES in this very PROMISING DIVIDEND MINE FOR SALE, at 31s, 6d, per share nett... Address, "W. S.," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

ORTH TRESKERBY MINE.—FOR SALE, BY PRIVATE
TREATY, ONE HUNDRED AND TWENTY-SEVEN SHARES; and
WANTED TO PURCHASE, TWENTY WHEAL TRELAWNY SHARES.
Address, "Y. D.," MINING JOURNAL Office, 26, Fleet-street, London.

SOUTH CROFTY MINE.—ALL LETTERS, TRANSFERS, &c., addressed to the Purser, MUST BE DIRECTED "SOUTH CROFTY MINE, POOL, CAMBORNE." E. H. RODD, Purser.

SECONDHAND BRIDGE RAILS, fit to re-lay, about 250 tons, weight about 55 lbs. per yard, FOR SALE, cheap.
Address, "A. N. C.," 3, Star-alley, Fenchurch-street, London.

ON SALE,-THE DOLGOCH SLATE QUARRIES, ON SALE,—THE DOLGOUR SLATE QUARRIES, TOWYN, MERIONETHISHRE.

These quarries contain the same veins, and are situated only 1½ mile W.S.W. of the renowned Bryn-yr-Egiwys Quarries. A plentiful and constant supply of water flows through the premises, and the Towyn and Tal-y-Liyn Rallway passes within fifty yards of the works, with running powers already secured. Samples of slates can be seen on the premises, and ample means are afforded of inspecting the veins.

Further particulars may be obtained from WM. WMs. JONES, Towyn.

MINE LEASE.—FOR SALE, on favourable terms, the valuable LEASE of a FIRST-CLASS SILVER-LEAD MINE, situate thirteen miles south of TREGARON, in CARDIGANSHIRE, in the immediate neighbourhood of several well-known rich mines. The sett comprises 500 acres, with ample water-power. A shaft has already been sunk on one of the lodes to a depth of 18 fms., and several parcels of rich silver-lead ore sold, which realised a high price. It has also been most favourably reported on by well-known practical miners, and it is believed that a very moderate additional expenditure would suffice to render it a permanent dividend mine.

Address, "J. S.," MINING JOURNAL Office, 26, Fleet-street, E.C.

MID-WALES LEAD MINING COMPANY (LIMITED).
Notice is hereby given, that the FIRST ORDINARY ANNUAL MEE
(NG of this company will be HELD at the Cannon-street Terminus Hotel,
FHURSDAY, June 18, at Two o'clock in the afternoon, for the purpose of

elving a report from the directors, with a statement of accounts, and for su ther business as may be incidental thereto. By order of the Board. 26, Nicholas-lane, London, June 3, 1868.

CHONTALES GOLD AND SILVER MINING COMPANY CHONTALES GOLD AND SILVER MINING COMPANY (LIMITED).—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of this company will be HELD at the London Tavern, Bishopsgate-street Within, in the City of London, on TUESDAY, the 16th day of June, 1868, at Twelve o'clock, and that resolutions will be submitted to such meeting, and proposed for adoption, authorising the directors to borrow on debentures of the company any sum not exceeding £30,000, with interest, and authorising the directors to charge the mines and property of the company with the payment of such debentures, and to provide for the repayment thereof out of profits, by lot or otherwise, or the conversion thereof into ordinary shares of the company, or for authorising the directors to raise the above-mentioned sum in such other manner as shall be determined by the meeting.

And notice is hereby given, that a special resolution (to be confirmed at a subsequent meeting) will be proposed at such meeting for altering the Articles of Association of the company, so as to enable the directors to create and issue debentures of the kind and with the privileges necessary for giving effect to the preceding proposed resolutions, and especially for authorising the directors to convert debentures of the company into shares.

By order, J. JAMESON TRURAN, Secretary.

185, Gresham House, London, May 27, 1868.

Contract for Bolt and Sheet Copper.

BY ORDER OF THE SECRETARY OF STATE FOR INDIA IN COUNCIL. NOTICE IS HEREBY GIVEN that the DIRECTOR-GENERAL OF STORES FOR INDIA will be READY, on or before Monday, the sth June next, to RECEIVE PROPOSALS in writing, sealed up, from such persons as may be willing to SUPPLY—

BOLT AND SHEET COPPER, And that the conditions of the said contract may be had on application, addressed to the Director-General of Stores, India Office, Westminster, S.W., where the proposals are to be left any time before Two o'clock P.M. of the said sth day of June, 1888, after which hour no tender will be received.

India Office, May 29, 1868.

GERALD C. TALBOT, Director-General.

#### PIG LEAD.

M ESSRS. WESTON AND COLLINGBORN SOLICIT ORDERS for SOFT PIG LEAD, which they are producing of the very best quality Prices on application.

WORKS,—SWINFORD, GLOUCESTERSHIRE.

OFFICE,-18, PETER STREET, BRISTOL.

#### SLATES.

WALNEY SCAR QUARRIES, SITUATE NEAR CONISTON OLD MAN.

For particulars and samples of these very durable green and grey slates, address "Manager," Walney Scar Slate Works, Broughton-1a-Furness.

RATING OF MINES.—The Bill for assessing mines—"the Rating of Mines Act, 1868"—for local rates, as passed through Committee of the House of Commons, provides that all mines in England and Wales (Ireland and Scotland are not included) are to be rated to the relief of the poor, to the highway and county rates, and to other local rates, but the rate is to be made upon an estimate of the nett annual value of the mine, or of the rent at which it would let from year to year, free from usual tenants' rates and tithes. The "mine" includes buildings of every description, except houses occupied as residences; also all engines, general plant, and the whole of the underground workings of the mine.

MANUFACTURE OF STEEL BY FRICTION.—A process, which it is anticipated will prove even more important than that of Mr. Bessemer, inasmuch as it is hoped that it will be free from the objection that the worn metal cannot be economically re-melted, is now about to be introduced. The invention consists in the use of machinery by which pig-iron is ground to powder by a very rapidly-moving cutter. The extreme friction produces a heat so intense that the iron is set on fire, and, after scintillating, falls down a reddish-brown dust. The combustion causes the superfluous carbon to be got rid of; the dust is then put into a crucible, melted, and when cooled is found to be ingots of very good steel. This process was explained at the recent conversazione of the Institute of Civil Engineers.

Combustion of Coal.—At the Academy of Sciences, Paris, M. Schourer-Kestner communicated the result of a series of experiments on the combustion of coal, and from which it appears that when the influx of air is insufficient—that is to say, when the gaseous substances burned do not contain more than 6 to 10 per cent. of air in excess, the loss of carbon in the shape of combustible gas represents about one-fifth of that contained in the coal consumed, and that this loss diminishes considerably when the air contained in the burned gas is equal to from 20 to 50 per cent. The loss of hydrogen is more considerable, and oscillates between 10 and 20 per cent. of that contained in the coal.

Date. Mines. Tons. Price per ton. Purchasers. June 2-Isle of Man Mining Co.100 . . . . . . 22 18 6 . . . Burry Port Company.

Date	e.	Mines.	*	Con	8.	Am	oni	nt.	Purchasers.
May :	30-1	Frank Mill	18	100		£13	4	0	 R. Michell and Son.
									Sheldon, Bush, & Co.
	-	ditto	******	10		13	16	6	 Panther Smelting Co.
	_	ditto	*******	20		8	18	6	 Peter Glover.
	-	ditto	******						
June	2 - I	Brynpostig		30		11	3	0	 Sims, Willyams, & Co.

#### BLACK TIN.

Purchaser. 

#### COPPER ORES.

Sampled May 20, and sold at Tyack's Hotel, Camborne, June 4,

	Mines.	Tons	Pr	ice.		Mines.	Tot	18.	Pi	dee.	
١	Wh. Seton[	Pendarves117	21	2	6	CliffordAmalgamate	1 45		£2	5	6
	ditto	86	2	18	6	ditto	. 31		- 3	9	0
	ditto	76	3	6	6	South Crofty	. 91		1	18	0
	ditto	73	4	18	6	ditto	. 93		2	1	6
ŀ	ditto	69	- 5	17	0	ditto	. 81		2	0	0
	ditto	65	4	14	0	ditto	. 63		3	0	6
	ditto	******* 69	3	1-4	6	ditto	. 54		7	4	6
	ditto	65	4	6	6	ditto	. 39		1	17	6
	ditto	54	5	6	6	ditto	. 16		12	6	0
i	ditto	51	4	4	0	West Tolgus	. 89		4	5	0
	ditto	45	3	18	6	ditto	. 84		4	3	0
	ditto	19	0	15	0	ditto	. 81		4	5	0
	ditto	6	1	11	0	ditto	. 62		4	0	6
	West Seton			0	6	ditto	. 48		4	0	0
	ditto	******* 72 ****	3	5	0	ditto				12	6
	ditto	63	7	11	6	East Pool	. 67			12	6
	ditto	61		14	0	ditto				9	6
	ditto	******* 58 ****		17	0	ditto				6	6
	ditto	55		3	0	ditto				1	0
	ditto	53	- 8	3	6	Wheal Basset	. 51		3	11	0
П	ditto	51	4	17	6	ditto				3	0
	ditto	38		15	0	ditto				12	0
	ditto	36		6	6	Carn Camborne			3	1	0
1		algamated104	3	16	6	ditto			1	5	6
ı	ditto	101	2	13	6	Tincroft			4	11	6
	ditto	80	4	13	6	East Basset			4	10	6
	ditto	76	3	14	6	Dolcoath			6	10	0
۱	ditto	64		18	6	Pendarves United	. 5		4	5	0
П	ditto	49	3	18	6						

#### TOTAL PRODUCE.

West Seton	568		2765	12	0	Carn Camborne	71		163	6	0
									150	19	6
South Crofty	440		1384	4	6	East Basset	28		126	14	0
West Tolgus	383		1600	10	6	Dolcoath	24			0	0
East Pool	165		441	7	6	Pendarves United	5		20	10	0
	West Seton Clifford Amalgam South Crofty West Tolgus	West Scton 568 Clifford Amalgam 550 South Crofty 440 West Tolgus 383	West Seton 568 Clifford Amalgam 550 South Crofty 440 West Tolgus 383	West Seton 568 2765 Clifford Amalgam 550 1977 South Crofty 440 1384 West Tolgus 383 1600	West Seton 568 2765 12 Clifford Amalgam 550 1977 18 South Crofty	West Seton	West Scton        568        2765       12       0       Carn Camborne         Clifford Amalgam       550        1977       18       6       Tincroft         South Crofty        40        1384       4       6       East Basset         West Tolgus       383        1609       10       6       Dolcoath	West Seton        568        2765       12       0       Carn Camborne        71         Clifford Amalgam       550        1977       18       6       Tincroft        33         South Crofty        440        1384       4       6       East Basset        28         West Tolgus        383        1600       10       6       Dolcoath        24	West Scton       568       2765       12       0       Carn Camborne       71         Clifford Amalgam       550       1977       18       6       Tincroft       33         South Crofty       440       1384       4       6       East Basset       28         West Tolgus       383       1609       10       6       Dolcoath       24	West Seton     568     2765     12     0     Carn Camborne     71     163       Clifford Amalgam     550     1917     18     6     Theroft     33     150       South Crofty     440     1384     4     6     East Basset     28     126       West Tolgus     383     1600     10     6     Dolcoath     24     156	South Crofty 440 1384 4 6 East Basset 28 126 14 West Tolgus 383 1600 10 6 Dolcoath 24 156 0

COMPANIES BY WHOM THE ORES WERE PURCHASED. 

Total ..... \$12,256 18 6

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday next.—Mines and parcels.—Carn Brea 481—Crenver and Abraham 433—Prosper United 381—Par Consols 318—Great South Tolgas 139—Emily Henrietta 138—North Downs 133—East Carn Brea 127—Rosewarne United 25—Rosewarne Consols 24—Troworlis 15—Trannack 8—South Dolcoath 7—Pembroke 2.—Total, 2231 tons.

Copper ores for sale at the Royal Hotel, Truro, on Thursday week.—Mines and parcels.—Devon Great Consols 1752—Marko Valley 441—Brookwood 301—Okel Tor 280—Hingston Down 225—East Caradon 184—Prince of Wales 138—Gawton Copper 131—Matthews' Ore 100—Wheal Friendship 73—Gonamena 57—Wheal Russell 50—Craddock Moor \$5—Sortridge Consols 16—Total, 3784 tons.

NEW WORK BY JOHN BOURNE, C.E.

#### Published this day, Part I., in ato., price 2s. 6d. EXAMPLES OF MODERN STEAM, AIR, AND GAS ENGINES,

Of the most approved types, as employed for PUMPING, for DRIVING MA-CHINERY, for LOCOMOTION, and for AGRICULTURE, minutely and prac-tically described. Illustrated by Working Drawings, and embodying a Critical Account of all Projects of Recent Improvement in Furnaces, Boilers, and En-gines.

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#### Notices to Connespondents.

COAL IN BELGIUM.—Can any reader give me some information respecting the coal fields of Belgium? Those of France rest on the granite formation, but I suspect that in Belgium they have the Silurian and Devonian flooring; but, as these in Shropshire thin off to the east, it is possible that they never reached Belgium, which, at the time of the formation, must have been to the east of Yorkshire; and the Cretaccous "extends into Northern France, and thence north-eastward into Germany, whence it is traced into Scandinavia and Russia."—F.

Russia."—F. METALLURGY OF IRON—" Enquirer."—The work alluded to is, no doubt, "Dud Dudley's Metalium Martis, or Iron Made with Pit Coale, Sea Coale," &c. It has been reprinted by Her Majesty's Commissioners of Patents, and can be obtained upon application at their office, Southampton-buildings, Chancery-lane. The price is 9d. by post.

Chancery-lane. The price is 9d, by post.

THE COPPER TRABE—"T. H." (Manchester).—The quotations published weekly in the Mining Journal are given upon the best possible authority, and are considered to be quite reliable. A seller may occasionally be a tile to obtain 2t. per ton more than the price quoted, just as a buyer may sometimes be fortunate enough to purchase at 2t. per ton less. The comparison "with London and local papers" (possessing probably fewer facilities for obtaining information on the subject), as suggested by "T. H.," would prove nothing, and the quotation of exceptional prices paid in isolated transactions as the general market rates would give great dissatisfaction. From the recent falls in the price of ore, however, many would be glad to accept a lower price at once than risk the greater decline which they might consider probable.

MINE ACCOUNTS—TINCROFT.—I find by the financial statement just issued that although the accounts are made up to May 29, the last month's cost charged is January, while the date to which the tin has been sold is not stated. How do the committee explain this?—ANXIOUS: Pensance.

We are very certain "Z. A." could not have been influenced as he states; the opinion and desire of the authority referred to were decidedly opposed to the class of companies in which the writer appears to have embarked. Application should be made to a mining broker, as we never recommend the sale or purchase of speculative property.

## THE MINING JOURNAL

Bailway and Commengial Gazette.

LONDON, JUNE 6, 1868.

THE DISAFFECTED IRONWORKERS.

THE DISAFFECTED IRONWORKERS.

There lies before us what seems to be in every way an honest balance-sheet of the money raised and expended amongst the "Amalgamated Malleable Ironworkers of Great Britain," as the head of the sheet announces, during the still lingering strike in South Staffordshire. The document is issued from "the Central Committee," and is dated from Walsall, May 30. The period to which it relates is from April 30 to May 25. The total amount received in that period is set down at 4744. 17s. 9½d., inclusive of a loan of 4t. The largest item is "Subscriptions from West Bromwich, 85t. 14s. 9½d." The next largest is "Subscriptions from the Patent Shaft Works, Wednesbury, 70, 8s. 6d." At and about West Bromwich there are several small works, at which the men are kept employed at the old wages, "subject to the decision of the country," and the puddlers at the Patent Shaft Works, Wednesbury, are, as we have before intimated, working without having yet received notice for a drop, that establishment not being understood as regulating its proceedings by the determinations of the masters generally as an association. The next largest subscription comes from the same locality, and appears as "Gold's Green, 43t. 12s. 9d." Next we have "Old Park Works, Wednesbury, 42t. 3s." Brierley Hill, the former head quarters of the Union, stands at 40t. All these amounts seem to have been made up of small individual subscriptions, and the only sums which appear as "District Funds" are—"Grant from Bilston District 20t.," and "Gold's Green District Funds 11t. 4s, 2d." Out of the total of 474t, 17s. 9½d., about 360t, has been raised in the district in which the strike has taken place, and it stands on the balance-sheet in 13 items. The balance of 115t, has been raised outside that district, and occupies 41 items. The two largest of these are—"Dallam Forge, Warrington, 24t, and Witton Park branch 10t." The Dallam Forge, item is entered amongst local subscriptions, doubtless for the reason that the men there form part of the O and occupies 41 items. The two largest of these are—"Dallam Forge, Warrington, 24%, and Witton Park branch 10%." The Dallam Forge item is entered amongst local subscriptions, doubtless for the reason that the men there form part of the Old Brierley Hill Association. By that amount the 115% may, therefore, be fairly reduced as moneys obtained outside the South Staffordshire district. We, therefore, have 91% as the total amount of money contributed by the "Athalgamated Malleable Ironworkers of Great Britain" who are not located in South Staffordshire towards the support of their fellows on strike in that district against the reduction of wages. Can anything be more conclusive of the nonsense of these high-sounding designations? There is, virtually, no Union of Ironworkers in Great Britain. At one time there were two, but they have killed themselves, and the three paid officers who are now attempting to work this so-called Union will soon be starved out for want of funds, even as the men are being starved in to work from the same cause.

The only distributions of money which have taken place amongst these misguided men comprised 1s. 10d. each on May 11, and on May 25 2s. to each forehand, and 1s. to underhands. On the first date 2328 men were relieved, and on the second the forehands relieved numbered 1932, and the underhands 315. The total amounts disbursed were—May 11, 214% 19s. 10d.; and May 25, 208% 19s. Nearly 400 forehands seemed to have gone in between the first two dates, and the distribution of relief amongst the underhands on May 25 would indicate that these also were going back to the forges. The effort to stop this natural result is shown in the fact that 50% has been expended in the railway and other expenses of the delegates and the central committee, who have gone into different parts of the kingdom been taken the committee, who have gone into different parts of the kingdom

pended in the railway and other expenses of the delegates and the central committee, who have gone into different parts of the kingdom (with what pecuniary result we have already intimated) to get funds. The places visited are set down as the North, Scotland, West Riding of Yorkshire, North Staffordshire and Manchester, South Wales, Shropshire, and Codnor Park. Then we have a yet more vigorous effort to bleed the North of England, Scotland, and Wales, for to those legates, Mr. Hobson, who is one of the joint secretaries, has been sent, and the balance-sheet shows, as one of the particulars of the 501, "71.

advanced to Mr. Hobson to go to the North," &c.

It has been remarked as "indeed strange to find Mr. Kane, in his evidence before the Royal Commissioners, saying that working men are invariably deceived when they put any dependence upon the pro-mises of support made by their fellow-men, and yet, in the course of a few months afterwards, organising, or attempting to organise, a great strike, and holding out to the victims the most flattering prospects of large sums of money if they would only persevere in their resistance." Mr. KANE, and the other officers of the Union, knew well before the strike commenced what would be the result of "their sappeal to the country;" yet the men were deluded into the belief that a different result would upon this occasion be brought about; and, notwithstanding that they have been unable to find the men even 8d. a week, they still prosecute their efforts; for the balance-sheet contains an appeal, in which the central committee "hope the assistance of the various trades, friends, and public generally will still be continued towards the support of the 2000 men who are still out, and are determined to stand out until the employers shall see the injustice of their demand for the reduction." The last return of men relieved showed—forehands in Wolverhampton, 345; and underhands, 66. Our correspondence shows that all these are now either at work or ready to begin work-all on masters' terms-if their employers can

find them work to do; and that so far as it relates to that town, the strike is now confined to a few shinglers at one of the works those men refuse wages which amount to between 10s. and 15s those men refuse wages which amount to between 10s. and 15s. a turn, because their employers are taking off allowances as extras, which they could at one time obtain from their customers, but which are now no longer possible. Operatives elsewhere are not likely to contribute towards the support of men who refuse such wages. It is a truly pitiable fact that the ironworkers of Staffordshire should be throwing away their opportunities, and permanently injuring one of the finest industries of the country, with so little show of reason as is now being set up; and it is a further pity that so much encouragement to the course they are pursuing should be found in a want of co-operation with the bulk of their order on the part of certain of the employers themselves.

#### THE WESTERN COUNTIES.

At many of the works connected with the coal and iron trades in western counties business, although not active, is yet tolerable.

As their condition, however, is seldom or never noticed, progood. As their condition, nowever, is sented to bably owing to the scattered character of the mines and collieries the result of a personal visit bably owing to the scattered character of the mines and colleries, as well as of the iron establishments, the result of a personal visit to several of the districts may not be altogether out of place. Commencing with the county of Worcester, where the pits in the neighbourhood of Oldbury, Bewdley, and Stourbridge give employment to nearly 3000 hands, the colliers appear to be doing fully as much, if not more, than in the Derbyshire and South Yorkshire districts. In not more, than in the Derbyshire and South Yorkshire districts. In the ancient city itself, the capital of the county, amongst other works connected with the various branches of the iron trade there is a very large engine manufactury, capable of giving employment to nearly 1000 hands. The extensive range of buildings, which are situate close to the Midland Station, are in an architectural point of view very imposing, and in that respect superior to a great many of the large works to be found in most parts of the kingdom, and are highly creditable to the city. The machinery is of the most complete character, calculated to lessen labour. Trade has not been remarkably brisk up to a recent date, but we were informed that a large order has brisk up to a recent date, but we were informed that a large order ha lately been given out. From the position of the works, and the rail-way facilities afforded to all parts of the kingdom, and not being very far from the coal and iron districts, the establishment ought to very far from the coal and iron districts, the establishment ought to fully maintain the high position to which it has attained. Proceeding onwards, we find some small works at aristocratic Cheltenham; the first that meets the eye before entering the railway station being the "Lansdowne," a rather handsome building. Having got into Gloucestershire, most of the districts sunk into insignificance with the Forest of Dean, which is said to be 42,000 acres in extent, and which was considerable valued with cake for the supply of the British which was originally planted with oaks for the supply of the British Navy. The iron has superseded the oak in shipbuilding, and the Forest, which used to supply so much for the former purpose, now raises about 160,000 tons of the brown hematite ore per annum, a good deal of which goes into Wales. There are also a good many collieries connected with other works, but just now neither are very active. The ironwells at Framuton Cottrell are very gratly en. active. The ironworks at Frampton Cottrell are very greatly enlarged, and there is a fair business doing at some of the collieries in the neighbourhood of Yate and Mangotsfield; and close to Bristol, not very far from the city, is the Ashton Vale Works, belonging to a not very far from the city, is the Ashton Vale Works, belonging to a limited company, who have a blast-furnace and an ironstone mine, producing about 3000 tons of valuable ore per annum, together with a number of puddling-furnaces and rolling-mills. The company have also a colliery of its own, so that there is everything required for the manufacture of iron, as it were, on the premises.

"Small stock of iron needs that man provide,
His hinds and swains whole years shall be supplied From hence; nor ask the neighbouring city's aid For ploughshares, wheels, and all the rural trades."

Leaving Bristol a short hour's ride by railway brings us to Westensuper-Mare, in view of the Mendip Hills, which extend in length about 25 miles, being flanked on its opposite sides by the mountain limestone. But to return to the town of Weston, before climbing the hills, it certainly deserves to be characterised as one of the pleasantest

stone. But to return to the town of Weston, before climbing the hills, it certainly deserves to be characterised as one of the pleasantest and prettiest of watering places, and from which can be seen the opposite coast of Wales and the town of Cardiff. Not very far from it fortifications are being erected on two sides, so as to guard the Channel, whilst the inhabitants indulge in the hope that at no remote date, at a point a very few miles distant, vessels will take their departure from it for New York, as it is said to be the most direct point to that port. On the Mendip Hills, which rise sharply from Weston, there was formerly obtained a good deal of lead, of a particularly hard quality, more particularly in the central and western range, as well as the lapis calaminaris, which, when melted with copper, converts it into brass. There are now only three lead mines worked, the ore containing an admixture of silver. The quantity of ore raised in 1866 was 1132 tons, producing 675 tons of lead and 1488 ozs, of silver, and there has been apparently very little increase since. Returning from the hills, accompanied by the proprietor of the Westom Cazette, who kindly undertook the office of guide, through some charming scenery, we left the pleasant town with not a few regrets, but with a promise to re-visit it at no distant date, and devote some time to a thorough inspection of the mines, the valley of Cheddar, with its cliffs and caverns, as well as the collieries in the neighbourhood of Radstock. hills, it certainly deserves to be characterised as one of the pleasantest hood of Radstock.

#### TRADES UNIONS, AND UNION LEADERS.

The arbitrary character of the majority of the workmen connected with Trades Unions seldom or never, we believe, is brought to the light of day in its full intensity, and it is to be feared that in a great many instances those whom the public look upon as the leaders and paid demagogues are, in fact, the mere tools of the general body; indeed, it is questionable whether some of the Unions would tolerate enoughing in the shape of independence in a paid official when his deed, it is questionable whether some of the Unions would tolerate anything in the shape of independence in a paid official when his views clashed with those of the majority of the members. This state of things has been strongly exemplified by recent events connected with the reduction of the colliers' wages in several districts. When the Lancashire coalowners felt, in consequence of the general depression in the trade, that they were compelled to lower the price of coal to a considerable extent, and asked their workmen to bear a postion of the less until the advent of better times, the proposal coal to a considerable extent, and asked their workmen to bear a portion of the loss until the advent of better times, the proposal met with the most determined opposition. Some of the leaders of the Miners' Association, including Mr. PICKARD, of Wigan, counselled the men to accept the reduction, which appeared to them an inevitable consequence of the state of trade throughout the country. The men, however, would not hear of any reduction of wages, and at a meeting of the delegates, convened for the purpose of considering the masters' proposal, all deliberation on the subject was scouted as out of place. The delegates, in fact, had received imperative orders from the various lodges they represented to strike rather than submit to from the various lodges they represented to strike rather than submit to reduction. They were remonstrated with, and the effects of striking unmistakable clearness, still the men refused to give way, although some of the most intelligent of them, as well as the leaders, foresaw the consequences. Accordingly the strike took place, with what re-sults are well known. Scenes of the most disgraceful character, and outrages of a still more serious nature, were perpetrated, and in the prohibition of which not only the leaders but the local authorities were entirely powerless. The counsel of Mr. PICKARD was totally disregarded, and from the position he first assumed he was looked disregarded, and from the position he first assumed he was looked upon by many of the men as being leagued with the masters. Evidently not liking to be looked upon with suspicion, and to recover what appearance of influence he formerly had, he threw aside his first opinion and conviction by joining the men in their struggle against the reduction, reading his recantation in a highly inflamma-

The masters let things take their course, and, notwithstanding the violence used towards the men brought from Staffordshire, they were enabled to obtain the supplies of coal for their own requirements and for contracts from South Yorkshire and other districts. Ultimately the men were compelled to give way, and, as is usual in nearly all strikes, after the expenditure of a good deal of money, and the suffering of no little privation. Such was the origin and collapse of the strike in Lancashire, which had the effect of at least damaging one reputation for consistency and independence. About the same time the state of the coal trade in South Yorkshire was such that the col-

liery proprietors, after several meetings on the subject, proposed to their men a reduction to the extent of 5 per cent. only, giving them two or three weeks for the consideration of the matter, so that it two or three weeks for the consideration of the matter, so that it might be fully discussed by those most interested. Now, in no part of England is there an associated body of colliers stronger, numerically (having something like between 9000 and 10,000 members), having a larger fund at command, or more perfect organisation. Indeed, the body in a single year gave away nearly 5000% to further the formation of miners' associations in Derbyshire. The proposal, however, to reduce wages to the extent of 5 per cent. met with considerable opposition by the men, who are, probably, the best paid colliers in the kingdom. A special meeting of delegates from all the lodges connected with the association was convened, for the purpose of discussing the excediency of accepting the reduction or otherwise. The connected with the association was convened, for the purpose of discussing the expediency of accepting the reduction or otherwise. The leading men, amongst whom were Mr. NORMANSELL and Mr. CASEY, the paid officials, and who for years past worked hard to organise the association, and who have made it so powerful as it is, gave it as their conviction that the proposed reduction, so very moderate when contrasted with what had been enforced in other districts, should be accepted. This was opposed by a considerable number of the delegates, and the opposition was shared in by a majority of the workmen. The leading men alluded to, who had the temerity to give the advice they had done, were stigmatised in no measured terms, and were told that they were in league with the masters. They still, however, held fast to the opinion they gave in the first instance, believing it to be for the interest of the men; and, notwithstanding a deal of abuse, and even threats, with great difficulty carried their point.

it to be for the interest of the men; and, notwithstanding a deal of abuse, and even threats, with great difficulty carried their point.

The course adopted by the leaders we may state was fully endorsed by Mr. McDonald and the principal men connected with other associated bodies in various parts of the kingdom. Since the final settlement of the question, however, many of the men appear greatly dissatisfied, and have heaped no end of abuse on those who counselled them to accept the 5 per cent. reduction. One of the delegates, in fact, at a late meeting even went so far as to propose that Mr. Normansell should be dismissed from his office, but the motion met with little or no support. Still so great has been the annovance, so with little or no support. Still so great has been the annoyance, so intolerant the abuse indulged in by many of the men, that we are informed that both Mr. NORMANSELL and Mr. CASEY have given informed that both Mr. NORMANSELL and Mr. CASEY have given notice of their intention to resign their situations, desiring to have liberty of opinion free and unfettered in preference to holding office, however well paid, as the mere tools of a body of men by no means remarkable for their intellectual powers, or noted for their educational advancement or general courtesy. With those facts before us it certainly does not appear questionable whether the leaders of Trades Unions have not hitherto had a great deal more credit given them for power than they really deserved. Could the inner workings of many of the associations be bared we have no doubt that in a great many instances it would be seen that the so-called leaders were the mere tools of those who employed and paid them: and it a great many instances it would be seen that the so-called leaders were the mere tools of those who employed and paid them; and it is not at all unlikely that even BROADHEAD, with all his infamies, merely carried out the wishes of his society, preferring to do anything and everything sooner than give up the pay which he received. It is almost clear, therefore, that to have even the semblance of power, and to receive official pay, Trades Union leaders must carry out the orders of the general body, whilst their opinions must not run counter with those of the parties who employ them.

#### TRADE UNION CONFERENCE.

A Congress of Trade Councils, Federations of Trades, and Trades Societies generally, has been holding sittings in Manchester during the past week. Amongst the topics discussed was "Trades Unions an Absolute Necessity." Mr. KANE, who represented the malleable ironworkers to the extent of 6000—but how far correctly so may be inironworkers to the extent of 6000—but how far correctly so may be in-ferred from another article in this Journal—maintained that "Trades Unions were absolutely necessary, were the only means yet discovered for enabling a working man to obtain a fair day's wage for a fair day's labour." How far they are necessary, Mr. CHARLES MARK-HAM, the manager of the Staveley Iron and Coal Company, where between 4000 and 5000 men and boys are employed, showed in his evidence before the Trades Union Commissioners on March 17, when he said that expecting a few men in the pattern show there were no

evidence before the Trades Union Commissioners on March 17, when he said that excepting a few men in the pattern shop there were no Union men employed by his firm.

"There has been," he said, "no Trades Union in our district for 20 years, and I believe that if you were to appoint a Commission you would find that the rate of wages paid by us is higher than in any other district of the country where Unions are in existence, or else I do not think that men would come from all parts of the country as they do to us. Some of our men earn a great deal more money than they wish us to know."

Mr. Harrison enquired: Your evidence is that the men as a rule throughout your works receive higher wages than what they do in other district where there is a Union?—I have no doubt of it, was Mr. MARKHAM'S emphatic reply. During his evidence the same gentleman read a letter, which he forwarded to Mr. GLADSTONE before that statesman received a Trades Union deputation. In that letter Mr. MARKHAM wrote the substance of his evidence in respect of the

with districts under Union domination, and added—
"Taking all things into consideration, the men earn more money, are provided with better schools, and are gradually becoming more intelligent than in those districts where the Unions are aimost omnipotent. Much has been said of the advance of wages by Trades Union delegates, but they totally lose sight of the fact that wages of every description have risen during the last 20 years."

The best possible reply to such statements as have been made in Manchester in the past week is to be found in the experience of such men as Mr. Markham, who has been connected with working men during the whole of the past quarter of a century, and whose sympathies are altogether with them.

#### COLLIERY ACCIDENTS, AND COALOWNERS' LIABILITIES.

COLLIERY ACCIDENTS, AND COALOWNERS' LIABILITIES.

The decision of the Court of Session directing a new trial in the case of Weir against Merry and Cuninghame has been confirmed by the House of Lords. Considerable interest has throughout attached to the case, owing to the important question being involved as to the liability of a master for an accident to his servant, sustained by the liability of a master for an accident to his servant, sustained by the latter in the performance of his duty. In the inferior courts Mrs.

Weir, as mother of the collier killed, obtained a verdict for 100%; but the Court of Session directed a new trial, on the ground of misdirection. In delivering his judgment, the Lord Chancellor said the respondents were coal and ironmasters, owning the Haughhead coal pit, near Hamilton, in Lanarkshire. The pit had prior to November, 1883, been sunk 95 fms., and contained four seams of coal. The upper seam, called the Eli coal, had been worked out, and the respondents determined to work the next under the protection of the pit a scaffold was erected in the pit, by means of which to drive the level in the Pyotshaw seam. The scaffold was completed on Nov. 21, 1863, and on the following Tuesday Robert and Henry Wilson, the appellant's sons, went to work driving this level. The system of ventilation in the pit before the scaffold was placed there was of the usual kind, by downcast and upcast, and is was not suggested that before the platform was erected the system of ventilation was defective in any particular. The platform, however, interrupted the free circulation of the air in the pit, and although it is stated that appetures were left in the pit from the upcast side for the return of the air from the shaft below, by the standard of the pit form, however, interrupted the free circulation of the air in the pit, and although it is stated that appetures were left in the pit grown produced to the underground of the defenders as a miner, was killed by an explosion of free-damp plent, as the mother of t

all apparatus and machinery necessary and proper for the safety of their workmen—proceeded to bring under their consideration the circumstances relating to the ventilation arrangement or system of the pit in question, distinguishing between the keeping clear and in good working order the ventilation arrangements when complete, and after the deceased came to be engaged in the pit, and defect or default in the system of ventilation; and in reference to the latter he observed that if the jury were "satisfied on the evidence that the arrangement or system of ventilation in the Haughhead pit at the time of the accident in question had been designed and completed by Neish before the deceased was engaged to work in the pit, and that the defenders had delegated to Neish their whole power, authority, and duty in regard to the matter, and also in regard generally to all the underground operations, without control or interference on their part, the deceased and Neish did not stand in the relation of fellow-workmen engaged in the same common employment, and the defenders were not on that ground relieved from liability to the pursuer for the consequences of fault, if any there was, on the part of Neish, in designing and completing the said arrangements or system of ventilation."

In the same combined supersuer for the consequences of fault, if any there was, on the part of Nelsh, in designing and completing the said arrangements or system of ventilation.

In a case previously before the House of Lords, Lord Cranworth explained with great clearness the difference between the liability of a master to one of the general public, and his liability to a servant of his own, for an injury occasioned nor his public, and his liability to a servant of his own, for an injury occasioned nor high public, and his liability to a servant of his own, for an injury occasioned nor high the presonal neglect of the master himself, but by that of some person employed by him. To Lord Cranworth's statement of the law the Lord Chancellor (Lord Cairns) added that he did not think the liability or the non-liability of the master to his workmen could depend upon the question whether the author of the accident was or was not in any technical sense the fellow-workman or collaborateur of the sufferer. In the majority of cases in which accidents have occurred the negligence had, no doubt, been the negligence of a fellow-workman appeared to him to be an example of the rule, and not the rule itself. The rule, as he thought, must stand on higher and broader grounds. The master was not and could not be liable to his servant, unless there were negligence on the part of the former in that which he had broader grounds. The master was not and could not be liable to his servant, unless there were negligence on the part of the former in that which he had broader grounds. The master had not contracted or undertaken with his servant to do. The master had not contracted or undertaken with his servant to do. The master had not contracted with his business. The result of an obligation on the master personally to execute the work connected with his business. The place of being beneficial, might be disastrous to his servant of the themselves a new part of the master who did and the place of being beneficial, might be disastrous to his

#### MINING, METALS, AND MINERALS-PATENT MATTERS.

BY MICHAEL HENRY, Patent Agent and Adviser, Memb. Soc. Arts, Assoc. Soc. Eng.

Patent Agent and Adviser, Memb. Soc. Arts, Assoc. Soc. Eug.

The most recent applications relating to mining, metals, and minerals—applications which are rather numerous—include the following:—J. Ourr, of Blois, liquid or gas-meter for obtaining motive-power. W. E. Newton, Chancery-lane, grate-bars (communicated to him by A. C. FLETCHER, of New York). E. Jones, Redcliffe-street, Bristol, shadowless lamps (communication from P. Longwill, and M. Craig, of Melbourne). J. J. Harrop, of Manchester, and W. Corbett, of Clayton, production of iron and steel from ores and waste products containing iron. E. W. DE RUSETT, of Lewisham, engines worked by steam or other motive fluid. C. WIND-HAUSEN and H. BUSSING, of Brunswick, Germany, chimney-cowls. W. W. Johnson, R. Johnson, and M. W. Johnson, of Limehouse, manufacture of sheets of lead, or tin, or alloys or compounds of those metals. J. E. HOLMES, of Rusbon, machinery for cutting or dressing stone. H. A. DUFRENE, of South-street, Finsbury, construction of railway wheels (communication from Benoit Charvet, of St. Etienne, France). A. M. Clark, Chancery-lane, apparatus for dressing millstones (communication from A. Dubois and J. J. Poullley, both of 13, Boulevard St. Martin, Paris). J. Uldde, Paris, process for the ornamentation of glass, carthonware, and other similar was both of 13, Boulevard St. Martin, Paris). J. ULDIE, Paris, process for the ornamentation of glass, earthenware, and other similar materials. H. E. MINES, of Cheltenham, register stoves or grates for curterials. H. E. MINES, of Chettennam, register stoves or grates for curing smoky chimneys and controlling the draught of air. J. Reidy, of Kennington-park, Surrey, pickaxe for excavation and mining purposes. H. Balley and F. Balley, of Nottingham, manufacture of valves for the passage of air, water, or any other liquid or fluid. W. Dalziel, of Deptford, combination of cock and valve for controlling the flow of water from constant supply-pipes. T. S. Horn, of Grove-street, Newcastle-upon-Tyne, miners' safety-lamps. H. of Grove-street, Newcastle-upon-Tyne, miners' safety-lamps. H. HAINES, of Chancery-lane, manufacture of lead-pipe, and lead-pipe lined or cased with tin or other metal (communication from W. A. SHAW, of New York). G. T. BOUSFIELD, of Brixton, plating articles with a coating of metal. H. HIRZEL, of Leipzig, production of infammable gas, and apparatus used therefor. W. D. SPARTALL, of Liverpool, apparatus for consuming hydro-carbon oils in furnaces of marine and other boilers. M. CHAYAGRAT, of Rue Sainte Appoline, marine and other boilers. M. CHAVAGRAY, of Rue Sainte Appoine, Paris, closing and securing vessels containing liquids, especially applicable to those holding petroleum, light oil of schist, and other volatile explosive and dangerous liquids. D. Jones, of Inverness, furnaces and heating apparatus, having reference to the consumption or prevention of smoke. C. D. Abel, of Southampton-buildings, manufacture of alum and other aluminous compounds (communicated by H. Pemberron, of Allegheny, Pennsylvania, United States).

C. H. Wells, of New York, impregnating wood with olenginous and saline matters (communication from C. A. SEELY, of New York). The scaled patents include the following:—WILSON, Liverpool, lift-pumps. GRAY, Glasgow, metallic casks or vessels. HUGHES (communication from DURFEE), lighting, heating, and cooking apparatus. PERKINS and SMELLIE, Gorton, malleable metal of steely quality from Bessemer scap, or other Ressemer metal. LEIGH tus. Perkins and Smellie, Gorton, malleable metal of steely quality, partly from Bessemer scrap, or other Bessemer metal. Leigh, Laurence Pountney-lane, furnaces and combustion of fuel. Clarke, reduction of tin to render it applicable for coating metals and other purposes (communication from Jules Feaguieres, of Paris). Brownshill, Walsall, water tuyeres for blast-furnaces, smiths' fires, &c. Johnson (communication from Smith and Benedict, Pennsylvania), ships for containing and transporting oils or burning fluids, and for raising and supplying them as furnaces; also communication from Ross, Pittsburgh, furnaces. Lake (communication from F. Formhals, San Francisco), extracting and condensing volatile portions of ores. Jordan, Liverpool, furnace fire-bars. Gardner, Boston, treating metals and minerals to obtain oxides and other combinations, and separate metals from their ores or alloy (communication from Willard, Boston, and Adams, Franklin, Massachusetts). Giers, Middlesborough, cast-steel and homogeneous iron. sachusetts). GIERS, Middlesborough, cast-steel and homogeneous iron

THE TIN-PLATE TRADE—UTILISATION OF BLACK PICKLE.—In several of the works about Newport, and at one on the Derwent, a process for utilising black pickle has been introduced, which is stated to be eminently successful. Hitherto the black pickle has been suffered to escape into the adjoining streams, giving rise to innumerable complaints from fishermen and those residing on the banks. The pickle instead of being permitted to run to waste is collected in old wooden casks; the deposit is removed in a solid state, and utilised in any convenient manner, and the liquid portion so treated convenient manner, and the liquid portion so treated that one-third of the acid originally used is recovered as vitriol, and can be used again, whilst the remaining two-thirds is obtained in the crystals of copperas, or sulphate of iron, which are readily marketable. Further details will be given in next week's Journal.

-According to the invention of Messrs. Dowsett and Blythe, of London-street, E.C., the gas produced from the matter under distillation (such as coal tar, &c.) is caused to pass through a pipe commencing at the top of the retort, and terminating in the ashiit; they then burn it either by allowing it to pass through the fire on the grate bars, or on a diaphragm. The hydrocarbon vapour can be burned either alone or in combination with coal, coke, or other fuel.

THE BATTLES OF THE FUTURE—FIGHTING LOCOMOTIVES. THE BATTLES OF THE FUTURE—FIGHTING LOCUMOTIVES.—Incold argument, "nothing like leather," has just been brought forward in an amusing form by Mr. G. J. GUNTHER, who has entered the lists as a patentee of improvements in armour-plates of complicated and expensive section, in order to be able to present a smooth face to the enemy. He maintains not only that his improved plates would prove valuable in marine warfare, but that they would also be applicable expensive section, in order to be able to present a substantial enemy. He maintains not only that his improved plates would prove valuable in marine warfare, but that they would also be applicable in the battle field. After pointing out the advantages of armouplated locomotives, in comparison with caponières or turrets, he asks—"What army, be it even the very best organised of the now existing ones, could withstand the attack of an enemy whose advance is

assisted by a judiciously-distributed number of armour-plated fighting assisted by a judelously-distributed number of armour-plated ingitting locomotives or traction-engines, each one of which is scattering death and destruction along its road, while, at the same time, it is perfectly unassailable to any hostile force?" But this is not the only novelty due to Mr. Günther, for he also proposes cigar-shaped steam-rams, and the building of high armour-plated watch-towers, in electro-telegraphic communication with each other—the distance between them forming a base line by which the exact distance of the enemy could be determined trigonometrically. The towers are also to serve as be determined trigonometrically. The towers are also to serve as acronautical stations, the central balloon connected with the bomb-balloons being anchored to the top of them.

#### REPORT FROM SCOTLAND.

JUNE 3 .- Pig-Iron is again easier to purchase in this market, and a moderate amount of business is being done in warrants at the de-cline. The imports of Middlesborough iron into Scotland continue to increase from month to month, till the total for the year to the end to increase from month to month, till the total for the year to the end of May has reached 42,745 tons, against the much smaller sum of 15,065 tons in the corresponding period of last year. The Messrs, Gilmour, coalmasters, we understand, are erecting two new furnaces at Maryport, Cumberland, and intend shipping their coals at Troon for their smelting-furnaces at Maryport, where they intend to manufacture pig-iron for this market. The shipments of Scotch pigs from all the Scotch ports this year till date is 226,830 tons, against 255,470 tons in the same period of 1867; and of the first sum are included 10,185 tons for this week, against 11,685 tons in the corresponding week of last year. In Connal and Company's stores are 231,397 tons of iron, with warrants in circulation for 216,400 tons, leaving a margin of 15,000 tons to be operated upon. On Monday the market opened flat, and business was done as low as 51s. 7\frac{1}{2}d.; yesterday there was no change, but to-day the market was slightly firmer, with more desire to do business, and fully 5000 tons were done at 51s. 8d. and 51s. 9d. cash, closing, sellers, 51s. 8d. cash and 51s. 10d. a month, buyers 1d. less. No. 1, g.m.b., 52s.; No. 3, 50s.; Coltness, No. 1, 57s.; Gartsherrie, 55s.; Eglinton, 51s.; Glengarnock, 54s. Manufactured Iron is still in demand in small quantities, and orders being held back till wanted; specifications are all for instant delivery. There is also a continued weekness in prices, which makes the list of no practical value per se; every maker tries to get the best price he can. This week orders look as if they were going to be a little more plentiful, but by Saturday the tables may be turned, and the whole augury changed. Qecasional specifications for ship-iron are also being brought from their pigeon-holes, but large orders for ship-plates for the Clyde have been taken by the West Cumberland Iron Company, and are now in course of delivery. Ironfounding is not brisk, and brass and copper workers are barely employed.

Coals show the same of May has reached 42,745 tons, against the much smaller sum of 15,065 tons in the corresponding period of last year. The Messrs.

indifference, and coalmasters, while declaring their inability to pay more than the present restricted rates, deplore the combination of cir-cumstances which has brought the trade of the country into this dead more than the present restricted rates, deplore the combination of circumstances which has brought the trade of the country into this dead lock. The men, on their part, have agreed to a course of itinerant agitation throughout the entire mining districts, but it is evident that they may fulminate till the "crack o' doom" without being able to do themselves a particle of good. Coals can now be had 4s. a wagon (24 cwts.) under last year's prices, and that 4s. falls to be deducted off wages and the masters' profits. How much of that 4s. have the men lost, and how much the master? In some instances we could name the master has willingly given up his whole profits—Could anyone ask him to do more? The local papers are filled with notices of miners' meetings, but there is no new phase in the agitation to note; everything waits on the declaration of a general strike, and when that is accomplished then comes demoralisation and beggary! Depend upon it, those who advise a strike under present circumstances are not the miners' friends. The Lords having dismissed the appeal in the case "Weir v. Merry and Cuninghame," the agitation leaders have been rather thrown out of gear. The decision of their lordships is evidently one founded in equity, and, while setting aside the verdict of the jury, affirms that in case of injury to a fellow-servant there is no ground for distinction as to the position of the servant through whose fault the injury arose.

On Sunday forenon flames were observed issuing from one of the

On Sunday forenoon flames were observed issuing from one of the On Sunday forenoon flames were observed issuing from one of the Alloa Coal Company's pits, situated on the south shore of Gartmorn Dam. Messengers were inmediately dispatched to Alloa and Carsebridge Distillery for firengines, but the progress of the flames was so rapid that by the time they reached the spot nearly the whole of the wooden framework with which the shaft is lined, with the gearing at the pit mouth, was consumed. It is believed that the choffer which was used at the bottom of the shaft having been placed too near the timberwok. The fire has been completely extinguished in the under seam of coal, as well as in the upper seam, 9 fms. from the bottom, although the upper seam kept smouldering for a couple of days after the under seam had been extinguished. By this unfortunate occurrence about 80 people are thrown out of work. The shipioiners, notwithstanding the decision of the housejoiners.

seam kept shouldering for a coppe of days after the under seam had been extinguished. By this unfortunate occurrence about 80 people are thrown out of work.

The shipjoiners, notwithstanding the decision of the housejoiners to give them support, have withdrawn their demand, and have returned to their work on their old terms. Yesterday forenoon an iron saling ship of 800 tons, named the Birmah, was launched (after re-purchase) for Jas. W. Wood, Liverpool, and is latended for the East India trade. She was originally built for Mr. Ross, of Stirling, but was sold some time ago to her present owner.

#### REPORT FROM NORTHUMBERLAND AND DURHAM.

REPORT FROM NORTHUMBERLAND AND DURHAM.

JUNE 4.—The Coal Trade continues very quiet; a little improvement has, indeed, taken place lately, but this is not generally felt. The Coke Trade also is flat, as may, indeed, be expected, owing to the continued lifeless state of the iron trade. The new winnings in the district are being prosecuted with the utmost vigour, that is, at Throckley, Hertford, Harton, and other places. At Wallsend and Hebburn the water is being lifted from the Tyne collieries at a rapid rate, and it is expected that some of the Willington collieries will be laid dry at no distant date. A powerful Cornish numning-engine rate, and it is expected that some of the Willington collectes will be laid dry at no distant date. A powerful Cornish pumping-engine is to be erected immediately at Hebburn, to assist those important operations. The Wardley Colliery, which was partially sunk some years ago, has been purchased by the extensive firm known as John Bowes and partners, and the shafts are to be sunk shortly to the various coal seams which are known to exist. There are several seams of excellent quality here, and an extensive royalty, so that a large and important colliery may be expressed to be corned.

and important colliery may be expected to be opened.

There is nothing new to report respecting the Iron Trade: the price of pig-iron remains nominally the same, and the demand for manufactured iron has not changed materially. The occurrence of the holidays, of course, checks business of all kinds during the present week. The engine works and factories of the Tyne are doing a good usiness, on the whole

A new mode of utilising blast-furnace slags is about to be extensively introduced by Messrs. Crossley and Hutchinson, of Middlesborough-on-Tees. Their invention consists in the manufacture of alumina and its salts by the decomposition of blast-furnace slags. The slag is treated with hydrochloric acid, and the mixture is then evaporated to dryness, and the soluble chlorides dissolved out from The alumina is thus left mixed with the silica, and the dried mass. may be readily dissolved by any soluble acid, and filtered from the silica. The salt of alumina produced is then separated by evaporathus carried out:—The slag is reduced to powder, and placed in a suitable vessel; a proportion of hydrochloric acid (usually an equal weight) is then added, and the mixture allowed to stand until the slag is fully decomposed, the decomposition being facilitated, if desired, by the application of heat. After the soluble chlorides are dissolved out, the insoluble portion, which consists principally of silica and alumins, is then treated with sulphuric acid, and the sulphate

reached, and an abundant supply of fire-clay has likewise been obtained. The principal seam is the five-quarter, which is nearly 6 ft. in thickness, and of first-rate quality. The engines in connection with the colliery have been erected by Messrs. Nelson and Sanderson, South Shields. A branch line of rails connect the colliery with the north-eastern railway system; and the coal will be shipped at Tyne Docks. The site of the new colliery was beautifully decorated with flags and banners, and altogether there was much rejoicing. On the following day the workmen were regaled with dinner and tea, at the expense of the owners.

Mr. GEORGE ELLIOT, COALOWNER, ON OUR NORTH, COUNTRY

Mr. George Elliot, Coalowner, on our North Country Pitaen.—Amongst the witnesses examined by the Trades Union Commissioners was Mr. G. Elliot, an owner of extensive coalworks in Northumberland, Durham, Glamorgan, Mostyn, and Staffordshire, and the Conservative candidate for the representation of North Durham. Mr. Elliot, in answer to questions, said—"I have a great many coalworks; the largest are in Durham and Northumberland. More than 10,600 men are employed in them. I went down the pit at nine years of age. I did the ordinary work of a collier at Pensher, in Durham, till I was nineteen or twenty; after that I became a deputy, an overman, a colliery viewer and so on, and since then I have become a coalowner. The quantity of coal raised out of pits belonging to myself and friends, and under my management, is more than 2,000,000 tons annually. I have worked with my own hands at every description of work as a collier. The price we pay for getting our coals in South Wales, in Aberdare, is very much higher than what we should pay for the same work if we were doing it in Durham or in Northumberland. I think that the Northumberland people do more in seven hours than the Welshimen in eleven. I have myself had some trouble about the matter of wages, but I am a great admirer of pitmen. I do not think there is a finer body of men in the world than the pitmen of this country; and if you can inspire them with the feeling that you are fair, and intend nothing but what is just towards them, you can manage them."

PRESENTATION AT GOSFORTH COLLIERY.—The workmen met at Mr. GEORGE ELLIOT, COALOWNER, ON OUR NORTH COUNTRY

you can manage them.

PRESENTATION AT GOSFORTH COLLIERY.—The workmen met at Mr. Michael Arkley's, Victory Tavern, Gosforth, and presented Mr. Geo. Soulsby of Biggo's Main, with a handsome silver patent lever watch and gnard, from the establishment of Mr. Thos. Middleton, Newcastle, as a mark of esteem for his many valuable services.

#### REPORT FROM MONMOUTH AND SOUTH WALES.

JUNE 4.—The present week being one in which most classes indulge in a holiday, operations at the various ironworks have been somewhat the holidity, operations at the various from wrist have been somewhat retarded, but it is satisfactory to find that the reports of increased buoyancy referred to last week are being gradually strengthened as time progresses. The favourable position which some of the home railway companies have attained will, no doubt, cause a greater demand for rails; already one or two of the leading companies are in the market for several thousand tons, and it is generally believed that home engagements will be more numerous and for which leaves cannot be a superference of the several through the server server the several through the server server that the server server server the ser mand for rails; already one or two of the leading companies are in the market for several thousand tons, and it is generally believed that home engagements will be more numerous, and for much larger quantities, than has been known for some months. The depression which has existed so long in the Iron Trade has not been equalled for the past quarter of a century, but there are hopes of its now giving way to a better state of things, and this is strengthened by the fact that the Board of Trade returns lately issued show a slightly increased exportation of railway iron during April and the three previous months of the present year. The increase is no doubt owing to the large quantities sent to the United States and British colonies, the orders from which have been the means of affording better employment to the hands engaged at two or three of the rail mills of the leading establishments. Some large orders are being executed, and several vessels are loading rails at the local ports for the United States, with which business may be said to continue in a somewhat satisfactory position; and as the impeachment of President Johnson has virtually broken down, it is highly probable that the makers in South Wales will shortly receive some good orders from that country, for the completion of certain railway systems, and the re-laying of a large portion of the Delewaredivision. Sweden has sanctioned a loan of 2,000,000l, which will shortly be issued, for the construction of additional lines of railway, and it is probable that most of the orders arising therefore will be executed by continental houses, but it will be executed by continental houses, but it will be executed by continental houses, but it will be executed by which will shortly be issued, for the construction of additional lines of railway, and it is probable that most of the orders arising therefrom will be executed by continental houses; but it will, to some extent, check the keen competition which is now being carried on. Enquiries from India continue limited, but strong hopes are entertained of a large increase taking place in the demand before long, and this is somewhat strengthened from the fact of the East Indian Railway Company being about to give out a tolerably good order for rails and chains, and considerable quantities will be required for a further extension of the railway system in that part of the British empire. There is a Spanish contract in the market, and it is not improbable that it will fall into the hands of makers in this district. Shipments will be made in a few days to Russin, but it must be ad-Shipments will be made in a few days to Russin, but it must be admitted that the business transacted as yet with the Muscovite empire is not so great as many makers anticipated. There is no doubt that one or two of the orders expected to have reached South Wales have been secured by Belgian houses, and this week it is stated that the syndicate of Belgian works has obtained another order for nearly 10,000 tens of rails and other syndicial as a wice below the river in syndicate of Beigian works has obtained another order for nearly 10,000 tons of rails and other materiel at a price below that given in by Welsh makers. From the Continent enquiries have not materially altered during the past week, and the exports continue limited. Bars move off freely. Pigs of the best brands command a fair sale, and prices are considered to have an upward tendency. Tin-plate makers have more engagements on hand, and, as a rule, the works in the district are tolerably well employed.

in the district are tolerably well employed.

Steam coal proprietors are fairly placed for orders, and the trade may be said to have attained something like a satisfactory position. The principal demand is from the mail placket stations and Mediterranean ports, while to France and the other foreign markets about an average quantity is being sent. Operations are now being carried on with something like regularity at the various collieries where the men were on strike, and the effect is perceptible in the increased quantities sent down for shipment. The decision lately come to by the Lords of the Admiralty to have none but Welsh steam coal used on board Her Majesty's ships will cause some increase in the demand, and Government contracts will, no doubt, be more frequently in the market. House qualities are in better request, and owing to the increase in the output in the Monmouthshire district the competition is a little keener than it was a few weeks ago. Prices continue tition is a little keener than it was a few weeks ago. Prices continue low, and this being the season at which West of England and Irish houses lay in their winter's stock an increase in the shipments may

houses lay in their winter's stock an increase in the shipments may be confidently expected.

At the commencement of the past month a large number of the skilled hands employed at the Dowlais Works gave a month's notice, in consequence of the reduction in their wages being greater than they anticipated, and which they alleged was in excess of the amount they agreed for with their employers. At the time, the dispute nearly led to the entire stoppage of these vast works, but after a little consideration the majority of the men wisely returned to work on the reduction. It is gratifying to find that during the time which has elapsed the managers have consented to remedy certain admitted irregularities among the various classes of workmen, and the result has been that the bailers and others who gave notice have withdrawn, and operations are now being carried on with the usual regularity. The number of hands employed at the Dowlais Works is about 10,000, who sustain a population of, perhaps, 35,000; therefore, it must cause no surprise when it is said the threatened stoppage of the works caused considerable anxiety, but, as the calamity has now been averted, satisfaction is expressed on all sides.

A locomotive engine, entirely constructed at the Rhymney Ironworks, has been doing effective work for some days past. The engine has been constructed with special reference to the requirements of these works, but in

constructed with special reference to the requirements of these works, but in appearance it in no way differs from the highly-fluished locomotives imported from the North.

The opening of Porthcawl Harbour will afford increased facilities for the export of Iron and coal, which abound in that part of Glamorganahlee The opening of Portheawl Harbour will afford increased facilities for the export of Iron and coal, which abound in that part of Glamorganshire, more especially in the Llynvi and Ogmore valleys, where operations are being gradually extended; and, with the additional facilities afforded for exportation, there is no doubt they will shortly occupy a more prominent position in the commercial world than they do at the present time. The harbour rates authorised under the schedule referred to in the Liynvi and Ogmore Railway Act, 1864, will be charged on all goods landed or shipped at Porthcawl, except iron, on which 3d. per ton will be charged, but iron ore and pitwood will be imported free of rates.

The arrivals at Swansea include—the Clara, from Tilt Cove, with 535 tons of copper ore, for H. Bath and Son; Madeline, from Pena Blanca, with 535 tons of copper regulus, in bulk, for Elford, Williams, and Co.; Commodore, from St. Malo, with 98 tons of zinc ore, for Dilrwyn and Co.; Antonio, from Carthagena, with 75 tons of zinc ore, for Dilrwyn and Co.; Antonio, from Carthagena, with 75 tons of zinc ore, for of Dilrwyn and Co.; Antonio, from Carthagena, with 75 tons of zinc ore, for H. Bath and Son; and the Charlotte, from Tilt Cove, with 315 tons of copper ore, for H. Bath and Son; Rosaile, from Lisbon, with 55 tons of copper ore, for H. Bath and Son;

ROYAL INSTITUTION OF SOUTH WALES.—The annual meeting was of alumina produced is separated from the silica by washing, and may be obtained by evaporation and crystallisation in the usual way, or by merely adding the acid and crystallising without removing the silica. The Lizard's Farm Colliery, near Lanchester, belonging to Messrs. Stewart and Dormand, was formally opened on Monday. The operations were commenced toward the close of last year, and have been completed without injury to anyone. Three seams of coal have been to support the substitution in the susual way, or by merely adding the acid and crystallising without removing the silica. The society has been very satisfactory, and membership of the institution is now recognised, even beyond the limits of the Principality, as an honour well worthy of obtaining. During the year the number of new members admitted has exceeded the losses by death, removal, &c., by more than 70 per cent, with a corresponding increase in the number of associates. The receipts contrast avourably with those of preceding years, and the council anticipate that the means at their disposal next year will allow of making great additions to their library. That the cultivation and advancement of natural science, the elucidation of the history and antiquity of South Wales, the encouragement of literature and the fine arts, and the general diffusion of knowledge, are greatly facilitated, by such associations as this is beyond question, and as their success contributes alike to secure them a high position amongst the educational societies of the kingdom, and to enhance the value to individual members of the privilege of connection with them, it is to be hoped that every effort will be made, both in and out of the council, to secure a continuance of the prosperity which has attended the Royal Institution of South Wales, until it shall attain as honourable a place in the scientific world as its prototype in London enjoys.

FOREST OF DEAN.—There is very little change in the coal and iron trades since last reported. The principal occurrence was the opening of the Dean Forest Central Railway, which took place on May 25, when a successful run was made between Gloucester and Howbeech. The engine and van attached were decorated, and appeared to create considerable interest among those who witnessed the event. We are informed that the railway company intend to run their engine and trucks three days in the week only, at least for the present; but we should be glad if two or even three engines are soon required on the line, as it is a great disadvantage to the people of the district that no passenger railway exists. If the present company were to continue their line by Parkend and Coleford to meet the Monmouth-line, and also continue that portion aircady set out by Foxes Bridge Colliery, connecting it with the Wimsey branch, and erect a station near to Nailbridge, and run a passenger train morning and evening each way, it would be a great-boon conferred on travellers here. There are no great difficulties to encounter in an engineering point of view, and consequently the construction of such a line of railway would not be very expensive. We trust that the day will shortly come when the railway company will adopt this course; we fail to see any reason why they should not. The past week has been noted for several accidents at an iron mine and collieries, none of which, however, proved, we are glad to say, fatal. We understand that the Messrs, Goold Brothers have recently entered into a contract for a supply of iron ore for their blast-furnaces from the Easter Iron Mine, near Coleford, belonging to Mr. Osman Barrett. FOREST OF DEAN .- There is very little change in the coal and iron

#### REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

JUNE 4.—There appears to be, on the whole, signs of improvement in the Iron Trade. The increased orders for rails, though many have gone to Belgium, and the demand for iron for shipbuilding, are filling the books of the ironmasters in the North, and also those of South Wales, and more orders may be expected in South Staffordshire. In North Staffordshire there is rather more doing, though that may arise from the strike in the southern districts, and until that is fairly over the actual state of the trade can scarcely be determined. In point of fact, the contest is now over. In the Wolverhampton dispoint of fact, the context is now over. In the work-manipular astrict has tweek an application was agreed to be made to Messrs. G. B. Thorneyeroft and Co. for a meeting of masters and men, and an answer was at once sent consenting to such a course, but suggesting that if a general meeting were desired, Mr. Barker, the Chairman of the trade for the year, should be applied to, but that the firm would be happy to receive any of the men who formerly worked there. Mr. Barker was seen and assented to call a meeting but on Tuesday.

be happy to receive any of the men who formerly worked there. Mr. Barker was seen, and assented to call a meeting, but on Tuesday there was a general assent at a meeting that the strike was over. Several men told a piteous tale. One of them said—

"It was all very well to talk about keeping out, and blanning the men who had gone in for the course they had taken; but for himself he was quite unable to keep out any longer. He was in such a state from want that he was sure he should be laid on a sick hed if he waited any longer, although he doubted now whether if he had work he could do it from weakness; and he should like to know if, supposing he was to be slek, and died in consequence of keeping out, whether those present would support his widow and two children? Hed id not so much blame young unmarried men for doing all they could in order to obtain what they deemed justice; but for himself, and such as him, they could not, he was sure, stand out any longer. If they would give him weapons to fight with he would be as good a soldler as any present, and stick upjust as firmly for his principle; but under present circumstances they must not blame him if he now went to work."

There is still a dispute with the shinglers, Messrs. Thornevcroft wishing to take off certain extras, to which the men take exception; but the struggle is really over now. In the neighbourhood of West Bromwich and Dudley a good many men are still out, but they cannot resist long. At the commencement of the strike it was stated that, unless liberal aid came from other districts the men must yield to the reduction. No doubt wages will now be low, but these are better than none, and the workmen are suffering less in proportion than their employers. It is pretty well known that a great firm in South Staffordshire made no profits whatever last year, and it is said that others are in scarcely a better position. Times are really bad, and we must endure and hope for better things.

Anarticle in the Mining Journal last week suggests the substitution of large for small blast furness.

Anarticie in the Mining Journal list week suggests the substitution of large for small blust-furnaces. At present, however, with so many furnaces out, people are indisposed to erect new ones, and there is a strong impression that these large furnaces would not suit South Staffordshire. There is only one large furnace in the district, and that is at Parkfield, near Wolverhampton, and it has been reduced by building a smaller one within it.

At Wednesbury and at Burslem, on Tuesday, persons were charged with steeling and others with receiving from and converged from

with stealing, and others with receiving, iron and copper stolen from works. In the latter case the marine store dealer who bought the iron was giving evidence, when the magistrate startled him by saying he should direct a summons to be issued against him, and the man almost fainted in the witness-box. The vast extent of pilfering which is encouraged by keepers of marine stores is terrible, and the mere loss of property to the owners is a trifle compared with the demoralisation of the population.

#### REPORT FROM DERBYSHIRE AND YORKSHIRE.

JUNE 4 .- There has not been much doing at the various works in JUNE 4.—There has not been much doing at the various works in the neighbourhood of Chesterfield during the week, owing to the holidays. There is, however, no change in the state of trade, which continues very quiet. There is only a moderate demand for manufactured iron; but a good deal of pig continues to be made, and stocks are now very large. The coal trade continues depressed, and there is no alteration in the business doing to London and the south, still in nearly all directions new collieries are being opened out. Mr. G. Senior, of Barnsley, who is sinking at Dronfield, is about to reopen the White Bank, or Pen Moor and Hasland Lane Collieries. The last-named pit has not been worked for two years, whilst the other has been filled with water for several years. New engines and pumps are about to be put down, and operations will be commenced.

The last-named pit has not been worked for two years, whilst the other has been filled with water for several years. New engines and pumps are about to be put down, and operations will be commenced almost immediately. In both pits the Dunston bed, which will be between 4 and 5 ft, in thickness, will be worked.

There is very little improvement in the state of affairs in the Sheffield district, and the week so far has been a very quiet one. The ironworks in South Yorkshire are kept moderately well going. In rails, sheets, and plates there is a fair demand, but the workmen at several places are not fully employed. At Milton and Elsecar, where for some time past there has been considerable activity, business has become rather quieter, still the men in all departments are kept fully for some time past there has been considerable activity, business has become rather quieter, still the men in all departments are kept fully going. Coalowners continue to complain of the slackness of trade, not only in house coal, but also in steam qualities, which at this season of the year is generally very good. The quantity going south by railway is limited, and the returns for the past month are far from favourable, either for the Great Northern Company or for colliery proprietors. To Hull and Grimsby there is no great increase in the tennesse and to the former port freights, by capal are far from reproprietors. To full and Grimsby there is no great increase in the tonnage, and to the former port freights by canal are far from remunerative, being as low as 63. 10s, per keel from Hemingfield, a distance of something like 80 miles. At Earl Fitzwilliam's extensive collieries there is only a very moderate business being done, and at several of the pits there are considerable stocks accumulated. Coke continues in fair request, and the quantity made keeps pace with the demand.

#### ACCIDENTS IN COAL MINES.

ACCIDENTS IN COAL MINES.

In the House of Commons, on Friday, Mr. GREENE rose to ask the Home Secretary what were the intentions of the Government with respect to the report of the Committee on Coal Mines. He was, he said, perfectly satisfied that accidents in coal mires might be reduced, and he thought the House ought to give its calm and dispassionate consideration to that important subject. He knew it was a disputed question whether by the appointment of official Inspectors the responsibility of the owners of mines might not be weakened; but he was himself convinced that active and competent officers, carrying out an efficient system of inspecting mines from time to time, would do much practical good in preventing these most deplorable casualties. No action had been taken on the report of the Committee which had enquired into that subject. What was wanted was a Commission of scientific and eminent men to look into that matter.

Mr. Ayrton thought that the course adopted by the House on a former occasion with regard to this subject should have been accepted by the hon, member as an intimation, not that they took no interest in the question, but that the hon, member had brought it forward at an inopportune moment. The hon, member had introduced the matter as though it were entirely new, apparently forgetful that for the last 30 years that House has been engaged enquiring into and legislating upon the question. The last committee that had sat

upon the subject had taken evidence of all kinds bearing upon the question, and they had a few months since presented their report, which contained many valuable suggestions for improving the system of mining and for amending the existing law upon the subject. Those who had taken the greatest interest in the enquiry were waiting until Her Majesty's Government should introduce some measure calculated to carry those recommendations into effect, and they were greatly surprised to find on the paper the hon. member's notice, which he was afraild would delay rather than accelerate the object he had in view. Having taken part in the labours of the Committee, he trusted its report had received proper attention from the Government, and that the House should have some information from the Secretary of State as to what course the Government intended to adopt for the purpose of giving effect to its recommendations.

Lord Elcho thought his hon. and learned friend had completely vindicated the House from the aspersions of the hon. gentleman who had introduced this subject. That hon, gentleman would lead the country to believe that there was indifference in the House to the subject; but from all he knew of the feeling of hon. members he could attest the existence of a strong and carnest desire to endeavour, by practical legislation, to protect the lives and to secure the health and well being of the mining population. His hon, and learned friend had given a very clear and accurate statement of what had passed on this question. What was wanted was practical legislation, not further enquiry. Mr. McDonald, the President of the Miners' Union, had given before the Trades Union Commission the most admirable evidence. He said further enquiry was not necessary. There were ample powers under the Mine Inspection Act, if properly and judiclously exercised, to establish a healthy state of ventilation in mines if the Secretary of Statefor the Home Department would only put them in operation. There was also power to fence off places suspec

Mr. NEWDEGATE expressed his belief that under the direction of ome Secretary great improvements in Inspection were made. The Home was now furnished with practical suggestions derived from the working of resent system, and if additional legislation were needed no one could better ly those suggestions in the form of an enactment than the present Home

secretary.

Mr. WHALLEY thought that nothing could be more worthy of conderation than the suggestion of the noble Lord the member for Haddington-hire, to bring to the aid of the salaried Inspectors the opinions of those who were personally conversant with the mines.

#### FOREIGN MINING AND METALLURGY.

The approach of the usual period of idleness, as regards the navigations, has exerted a favourable influence on the state of the various Belgian coal basins. The deliveries have been tolerably active this week, especially at Charleroi and in the Couchart de Mons. In the week, especially at Charleroi and in the Couchant de Mons. In the first of these groups stocks have been entrenched upon at several points, but we must add that they everywhere remain considerable. In the basin of the Couchant de Mons the extraction about meets current requirements. Prices present great variations, and it is difficult to define them exactly; upon the whole, however, they remain feeble. Freights have risen for almost all destinations. A tolerably satisfactory current of orders has been received on the Belgian metallurgical markets, and a tendency to a revival in affairs, which has been remarked of late, has become more decided. It is stated that a contract for 800 tons of rails and railway plant has been concluded by the Syndicate of Belgian Works for a Russian line. The Bleyberg-es-Montzen Mines and Foundries Company has declared a dividend for 1867 of £1.8s. per share. Meetings are announced as follows:—Haine St. Pierre Forges, Ironworks, and Foundries Company, June 13, at Brussels; Courcelles-Nord Colliery Company, June 27, at Brussels; Rhein, Main, and Lahn Mines and Ironworks, June 30, at Darmstadt; and Ascurlan Royal Mines, July 1, at Brussels; It cannot yet be said that there is any serious revival in affairs, but some orders which have arrived at the works, the tendency to firmness which prices have displayed, as well as a small rise on certain

It cannot yet be said that there is any serious revival in affairs, but some orders which have arrived at the works, the tendency to firmness which prices have displayed, as well as a small rise on certain special iron at Paris, are indications which induce the belief that the prolonged crisis in French metallurgical industry is coming to an end. This opinion seems, indeed, to be generally shared by purchasers, as well as producers. At St. Dizter rolled iron from charcoal-made pig is quoted at \$8.12s. to \$8.19s. per ton; ditto from coke-made pig, 61. les. to 7.4s.; and mixed iron, at \$8.4 s. to \$8.8s. per ton. Axles have made 94.12s. per ton for charcoal-made; at \$8.1 to \$8.8 s. per ton for mixed qualities; and at 74.12s. per ton for charcoal-made; at \$8.1 to \$8.8 s. per ton for inixed qualities; and at 74.12s. to \$8. per ton for coke-made. The orders received at the foundries are scarcely sufficient to maintain them in complete activity. A considerable quantity of Swedish iron in rods is now being used in the Moselle; it is stated that a Charleville merchant has obtained in Sweden a stock of about 15,000 tons, resulting from a liquidation. The General Belgian Water Conduit Company is executing at its Auberive Works about 1330 yards of pipes, for works of canalisation which it is about to carry out at Rome. Some works of the northern group intend, it is said, to announce to their clients an advance of 4s. to 8s. in the price of their iron, especially as regards iron for building purposes. This intention has been extited by the advance which has occurred at Paris, the rolling mills more in the neighbourhood of the capital which have furnished iron for building purposes having applied themselves to the fabrication of rails. The production has sensibly slackened in consequence, and this has enabled prices to be advanced 4s. to 8s. per ton. A congress of forgemasters, comprising 80 persons, has been held at the Grand Hotel, at Paris. The meeting, after hearing a paper by M. Sirct-Wagret, on the causes of the depres

A few miscellaneous items. The Montebras Tin Mines Company (Limited) agreed at a meeting held in July, 1867, to raise additional share capital to the extent of 10,000£; and we learn that this amount has now been declared to be subscribed. New shares (authorised in February, 1884) of the Aveyron Collectes and Foundries Company, to the amount of 80,000£, have also been fully subscribed. The Belgian General Company for Lighting and Heating by Gas—which has works at Arras, Bergues, Cambrat, Catana, Charlerol, Chemnitz, Dunkerque, Fournies, Herstal, Louvaine, Marchienne-al-Pont, Prague, Rimini, 8t. Omer, Slenna, Tournal, and Valenclennes Anzin—sold during September, October, November, and December, 1867, and January, February, March, and April, 1868, 246,574,161 English cubic feet of gas, as compared with 221,171,726 English cubic feet in the corresponding months of 1866-7; showing an Increase in 1867-8 of 21,402,438 English cubic feet. The royal direction of the Sarrebruck Mines has just published a new tariff; reductions appear to have been made in several qualities of coal and coke. Orders for bar-lron have come to hand more frequently of late at Essen, and it is also noted that when they are received they are of more importance than formerly. Commissions for rails seem exhausted to some extent for the present. The Administration of the Upper Sitesian Railway has given out orders for 23½ tons of forged Iron, and 2½ tons of cast-iron, for a bridge for a double line at Cosel. Thesame Administration has ordered 25 tons of forged iron, and nearly 7 tons of east-iron, for a similar bridge at Klodnitz. The Administration of the East Prussian Railway has noted 186 fourth-class passenger carriages, and 185 covered goods trucks, besides 448 steel axies and wheels, and a quantity of steel springs. A slight fall has occurred at Essen in pig; grey pig, No. 1, has made 34, 148, 4d, to 34, 168, 8d, per ton; pitter in pig; grey pig, No. 1, has made 34, 148, 4d, to 35, 168, 8d, per ton; if the Treaty of Commerce recently conclud

concluded between Austria and Prussia the duties on iron imported into Austria are sensibly reduced.

The directors of the Vicille Montagne Zinc Mines and Foundries Company have just reported progress for the past year. It appears that the total quantity of zinc minerals extracted by the company from its mines in 1867 was 53,362 tons, of galena and carbonate of lead 3119 tons, and of miscellaneous minerals 760 tons, making a total of 57,241 tons. The production of the company's collieries last year was 97,800 tons, that of the foundries in rough zinc 36,260 tons, that of the rolling-mills in rolled zinc 23,448 tons, and that of zinc-white 5242 tons. On the other hand, the general sales effected by the company in various countries amounted to 31,142 tons of zinc and 4940 tons of zinc white, making a total of 36,982 tons. The nect profits realised by the company last year, after providing for various deductions and redemptions, were 11,5501. Of this sum 18,7101, was carried to the statutory reserve; 10 per cent. of the balance remaining was transferred to the directors and commissaries, in accordance with the 13th article of the statutes (35551.); and 2½ per cent. of the same balance to the director-general, the secretary-general, and the sub-director (23881.) A sum of 81,0001, was then applied to the payment of a dividend of 14s. 63. per tenth share, and a final balance of 1461, was carried forward. We may, perhaps, make some further reference to the company's operations in 1867, meanwhile we may note that in the 15 years embraced between 1883 and 1852 inclusive the average return realised on the share capital expended was at the rate of 22-23 per cent. per annum; while in a second period 15 years, between 1883 and 1867 inclusive, the corresponding average was 26-65 per cent. per annum.

There has been rather more firmness observable in Chilian copper at Havre; disposable has found purchasers at 781, 10s, per ton, while

at Havre; disposable has found purchasers at 781. 10s. per ton, while for delivery some sales have been noted at 791. per ton, At Paris and Marseilles the article has been maintained without sensible variation in quotations. The tone of the German markets continues satisfac-

tory; small lots have been dealt in at former rates to meet the most pressing wants. The Dutch tin markets have presented no very striking change as regards tin; about 4800 ingots of Banca have been dealt in at Rotterdam, at 55 fis. to 55½ fist. os fist.; elliliton is quoted at 55 fift., but scarcely any sales have been noted. Business has been quiet, and prices have remained without variation on the French market; at Paris, Banca has made 99½; Detroit, 98½; and English, 98½, per ton. The demand for tin has been moderate on the German markets, but for small lots holders have, nevertheless, obtained full prices. More firmness is generally remarked in quotations for lead; the advices from Germany are especially more encouraging to holders, good qualities of lead being sought after at Hamburg, for instance. At Marseilles the price of lead has been firm, but without material change; lead in saumons, first fusion, has made 18½ 2s.; ditto, second fusion, 17½. 16s.; ditto in shot, 19½. 6s.; and rolled and in pipes, 20½. 12s. per ton. Prices have experienced no sensible variation at Paris, rough French making 19½. 14s.; Spanish, 19½. 10s.; English, 19½. 8s.; and Beigian and German, 19½. 14s. some considerable transactions in zinc have been noted at Breslau. At Hamburg sales have slackened a little, but, nevertheless, the article has acquired additional firmness.

#### MINING IN NEVADA, U.S.

[From our Correspondent.]

The most prominent feature of the new district of Silver Bend, apart from its valuable mines, is the superior mill of the Combination Com-pany, which has been constructed and put into successful operation

pany, which has been constructed and put into successful operation during the past year. It being a complete and well-appointed 40 stamp mill, a short description of it may not be uninteresting to the studers of the Missing dornard. It is situated about three-fourths of studers of the Missing dornard. It is situated about three-fourths of the studers of the Missing and the personal conformation of the million of completed machinery, and the operation of the buye works on turning out of completed machinery, and than by comparing it to the letter T, without of the person of the million of the million, and the million of the million of the million of the million, and the million of the million, and the million of the million of the million of the million, and the million of the million, and the million of th

ARTIFICIAL PRODUCTION OF SAPPHIRE.—Capt. Caron, a distinguished experimental chemist of Paris, announces that he has taken advantage of the property possessed by fluoride of calcium (common fluor spar) of dissolving alumina at a high temperature to obtain magnificent crystals of corundum (sapphire, rubles, &c.) He promises shortly to give a full account of the experiment.—Scientific Review.

HOLLOWAY'S PILLS—IMPORTANT TO THE SICK,—Though the mind be downcast and the body enfeched by confined indisposition, the sufferer should at this season make a last effort to regain health by taking Holloway's purifying pills, which, by cleansing the blood, will scarch out the indiden cause of mischief and expel the seeds of most diseases. No invalid is too much reduced to undergo this very genile treatment with safety and advantage. Neither youth nor old age need fear any injury to the system from a regulated course of these pills. They are infallible in stomach complaints, billous affections, sickness, want of appetite, disordered bowels, constipation, and the annoyances which spring from derangement of the digestive and assimilating organs.

#### STEAM, AIR, AND GAS ENGINES.

STEAM, AIR, AND GAS ENGINES.

Whether we have nearly reached the time when the steam-engine will be superseded by some more economical contrivance it would, probably, be dangerous to hazard an opinion, but it is beyond question that even the most approved form of steam-engine now at our disposal is very far from perfection, and that the study of what has already been effected is calculated to afford the soundest basis for renewed efforts. The defected is calculated to afford the soundest basis for renewed efforts. The description of information required is now being supplied by Mr. John Bourne, in the volume, the first number of which has just been issued. The work is intended as a supplemental volume to the "Treatison the Steam-Engine." by the same author, to which reference was a short time since made in the Journal. The "Examples" will be found of infinite value to a very large number of practical men, but, as Mr. Bourne observes, the book addresses engineers who have already a general knowledge of the subject, and wish to have their proficiency heightened, and their information rendered more modern and precise, by being informed what methods of construction are now most approved by the best authorities, and what are the latest features of successful improvement in engines of every kind. To this class of readers the book will present a fund of practical information not to be obtained elsewhere, and all the more serviceable and specific from the exclusion of elementary and scientific matter.

Although the first part contains little more than introductory matter, it affords evidence of the author's ability to compress a very large amount of information into a limited space. It is proposed to furnish selected examples of every approved variety of modern engine, with such fulness of detail as to permit of the engine being made from the drawings and information given; and the merits of alternative methods of construction will be simultaneously discussed, so as in each case to exhibit the grounds of any superiorit

\* "Examples of Modern Steam, Air, and Gas Engines of the most recent approved types, as employed for Pumping, for Driving Machinery, for Locomotion, and for Agriculture, minutely and practically described." By JOHN BOURNE, C.E. London: Longmans.

JEWELLERY, AND HOW TO TEST ITS VALUE.—In the eighth edition of the interesting little book by Mr. Edwin Streeter.—"Hints to Purchasers of Jowellery," a large amount of information is given, which, if carefully studied by the public, will prove of considerable pecuniary advantage. The circumstance of Mr. Streeter having long been connected with the firm to which he is now the successor—Hancock, Burbrook, and Co.—is a guarantee for his knowledge of the jewellery trade, so that the facts given will be accepted as such with confidence. Mr. Streeter explains the mode of estimating the value of gold and silver articles, the hall marks, and the caution requisite with respect to them, and the great economy of machine-made jewellery as compared with that produced by hand labour; p Julting out that suites which cost from 15t, to 26t, when made by hand labour; p Julting out that suites which cost from 1be 10t 10t. 10t. The cheapness which has always been observable in the Birmingham ware may be accepted as an evidence of the low price at which metal can be stamped—car-pendants, for example, of elaborate design having been sold at 3d. or 4d. the dozen pairs, and it is precisely this style of work, but, of course, executed in good quality gold, instead of gilded brass, which Mr. Streeter is now see extensively introducing, and which is giving such general satisfaction. The book, which is amply illustrated, is published by Messrs. Simpkin and Marshall, and is worthy of extensive circulation. JEWELLERY, AND HOW TO TEST ITS VALUE .- In the eighth edi-

#### THE WEST OF FRANCE ROCK-SALT COMPANY

BANKERS.

NATIONAL PROVINCIAL BANK OF ENGLAND, AND ITS BRANCHES. OFFICES,-40, OLD BROAD STREET, E.C.

The object of the company is the purchasing and carrying out an imperial concession for working a deposit of rock salt, estimated to contain more than 200 million of tons, situated at Dax, in the south-west of France.

The details of the enterprise, which in its nature is one of a most lucrative character, will be found at length in the printed prospectus, which can be obscined at the offices of the company.

character, will be found at length in the printed prospectus, which can be obtained at the offices of the company.

The concession, plans, Articles of Association, &c., can be inspected at the offices of the solicitors, Messrs. Parke and Pollock, 63, Lincoln's Inn-fields.

#### THE FALCON CLIFF MINING COMPANY

(LIMITED), ISLE OF MAN.

Capital £30,000, in 6000 shares, of £5 each,

Of which not more than £25,000 will in the first instance be issued

(With power to increase).

Deposit on application £1 per share. On allotment £2 per share.

The remaining £2 per share in calls of £1 each, nine and eighteen months from date of allotment.

DIRECTORS,
HENRY KELSALL ASPINALL, Esq., Claughton, Cheshire,
HENRY CHRISTIE BELOE, Esq., Unity-buildings, Lord-street, and Falkner-

square, Liverpool.

JACOB GAITSKELL BROWN, Esq., Shipowner, Hartfield, Allerton, and Can-

Mr. WILLIAM C. BEW.

REGISTERED OFFICES.
COLONIAL BUILDINGS, No. 36, DALE STREET, LIVERPOOL.

REGISTERED OFFICES.

COLONIAL BUILDINGS, No. 36, DALE STREET, LIVERPOOL.

PROSPECTUS.

The property of the Falcon Cliff Mining Company (Limited) comprises two very valuable mineral grants or setts in the parish of Rushen, Isle of Man, within two miles from the port of St. Mary, containing nearly 1000 acres, and being about 2½ miles in length from morth to fouth.

The northenmost or "Slock" Mine adjoins the celebrated Foxdale Mines, some of the master lodes of which run directly into this sett, and the present workings have proved that it possesses all the rich characteristics of its weathly neighbour; in addition to which, it has most uncommon advantages in the great height of country over the lodes, and its abrupt termination at the sea within a very moderate distance from the intersections of the several courses; thus obviating the necessity for expensive pumping machinery. Advantage has been taken of this by driving levels into the face of the cliff, a little above high-water mark, upon a fine east and west lode, from which, in the course of driving, many tons of splendid silver-lead ore have been taken (from one of them over 50 tons), thus demonstrating to a certainty that large deposits of ore will be found at the junction of this vein with the main north and south lode.

The southern or "Bell Abbey" portion of the set adjoins the property of the Ballacorkish Company, who are now raising a quantity of extremely fine silver-lead from lodes some of which can be shown to run directly into the property of this company. To this portion of the set the several engineers whose reports are appended to the prospectus call particular attention, on account of the magnificent appearance of the veins at every point where they have been in the least degree exposed. Several small trials by shafts and adits have been made in the Glen (which runs through the entire length of this portion of the property), and in every instance rich specimens of silver-lead, copper, and blende have been obtained, in some cases at less than 4

es—viz.: Capt. John Kitto (under thirst became a success).

Capt. JOHN RITTO (under whose management the Great Lakey sinies first became a success).

Capt. WILLIAM KITTO (Manager of the Snaefell Mines).

Capt. Absalom Francis (Consulting Mining Engineer, Holywell); and Capt. THOMAS MITCHELL (late of the well-known Parys Mines, Anglesca). The estimate which these gentlemen put upon the southern portion of the property has been more than confirmed by the recent discovery, close to the company's boundary, of a magnificent course of silver-lead ore (worth from £60 to £70 per fathom), at only 25 fms. deep, in a lode running directly into and through the company's property from south to north. Lead ore to value has at the same time and place been found at 9 ft. from surface.

These facts, confirmed by the unanimous opinion of all the practical men who have seen the property, are sufficient to satisfy the most cautious investor as to the companies and promise of the undertaking, and render further comment innecessary.

dinicessary.

The purchase money to be paid by the company is £5000 in cash and 800 paldup shares, leaving a working capital of £20,000, which the engineers consider more than amply sufficient to fully develope the property.

The remuneration of the directors will be fixed by the company in general meeting.

motion money will be paid, event of no allotment being made to an applicant his deposit will be

In the event of no allotment being made to an applicant his depose which setupned in full.

The Articles of Association, the surreyors' reports, and the Crown leases, may be inspected, free of charge, at the offices of the solicitors of the company.

Prospectuses and forms of application can be obtained from the bankers and solicitors, and at the offices of the company.

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK and group. All boiler works, GLASGOW, on the most investment of the state o D BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers forwarded post-free on application.

#### In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

N the MATTER of the COMPANIES ACT, 1862, and of the IN the MATTER of the COMPANIES ACT, 1862, and of the GREAT WHEAL BUSY MINING COMPANY.—Notice is hereby given, that a PETITION for the WINDING-UP of the ABOVE-NAMED COMPANY by the Court was, on the 26th day of May inst., presented to the Vice-Warden of the Stannaries by John Pool, of Hayle, in the county of Cornwall, the managing pariner of and in the firm carrying on business at Hayle, under the style or firm of "Sandys, Vivian, and Company," contributories and creditors of the said company, and that the said potition is directed to be heard before the Vice-Warden, at 18, Thurloe-square, Brompton, in the county of Middlesex, on Monday, the 15th day of June next, at Twelve o'clock at noon.

Any contributory or creditor of the company may appear at the hearing and oppose the same, provided he has given at least two clear days' notice to the petitioner, or his solicitor, or agents, of his intention to do so, such notice to be forthwith forwarded to P. P. Smith, Esq., secretary of the Vice-Warden, Truc. Every such contributory or creditor is entitled to a copy of the petition and affidavit verifying the same from the petitioner, or his solicitor, within 24 hours after requiring the same, on payment of the regulated charge per folio.

Affidavits intended to be used at the hearing, in opposition to the petition, must be filed at the Registrar's Office, Truro, on or before the 11th day of June next, and notice thereof must at the same time be given to the petitioner, or his solicitor, or agents.

JOSEPH ROBERTS, Truro, Cornwall (Solicitor for the Petitioner).

GREGORY AND CO., 1, Bedford-row, London Dated Truro, 29th May, 1868.

(Agents of the said Solicitor).

TO MINE AGENTS, IRON FOUNDERS, SMITHS, AND OTHERS. FURZE HILL WOOD MINE

HORRABRIDGE, near TAVISTOCK, DEVON.

MESSRS. MAY AND MURCH WILL SELL, BY AUCTION, on the MINE, at HORRABRIDGE, on Tresday, 9th of June next, at One o'clock P.M., in lots, the following very

VALUABLE MACHINERY, consisting of-

VALUABLE MACHINERY, consisting of—
A very superior 24 in. cylinder ROTARY ENGINE (nearly new), with BOILER about 10 tons; fly wheel, 24 ft. (alumeter; sweep md and other connections, all of the best construction, and in excellent condition.

ONE CAST IRON STAMP AXLE, carrying 12 heads; from lifters, with frames (complete), in good order.

WATER WHEEL, 30 ft. diameter, by 3 ft. 6 in. breast, with iron axle, sockets, saddles, and brasses; also, 12 head stamps.

ONE DRAWING MACHINE (new), never used, made from the drawings of Messrs, Loam and Sons, engineers; 2 double powerful crab winches; shears; poppet heads; flat rods; angle and balance bobs; pulley, stands, and wheels 4 ft. and other sheaves; 70 ims, of 7, 8, and 11 in. pitwork, with bottoms, complete; 40 fms, of 7 in. wood rods; plates; pins; steples and glands; 130 fms, or (B.B.) best whim chain, nearly new; several kibbles and tram wagons; 300 fms, tram iron; screw stocks, grindstone, bellows, vice; smiths, and miners' tools; two good blocks; hand screws; beams, scales, and weights; a quantity of obtadles, &c.

on the state of th

For viewing the same, apply to Captain Doidge, on the mine.
The mine is most conveniently situated for carriage, being within half-a-mile of the Horrabridge Station on the Tavistock Railway.

Refreshments on the table at Twelve o'clock, and the sale at One. Dated May 22, 1868.

MOLE TRAP MINE, NEAR CROMFORD STATION. TO COLLIERY PROPRIETORS, LEAD MINERS, AND OTHERS.
IMPORTANT and EXTENSIVE SALE, by ORDER of the PROPRIETORS

MR. GEORGE MARSDEN WILL SELL, BY AUCTION, on Wednesday and Thursday, June 10 and 11, con

THE ENTIRE WORKING PLANT OF THE MOLE TRAP MINE,

THE ENTIRE WORKING PLANT OF THE MOLE TRAP MINE, comprising, amongst other valuable articles—An excellent 66-horse power 3-valve PUMPING ENGINE, with hand gear, and hanging rod for same.

TWO tubular BOILERS for ditto (by the Butterley Company), each 26 feet long, and 5 feet diameter, water gauge and fittings, complete.
A capital 10-horse power high-pressure ENGINE, with brake on fly wheel, drawing indicator, drum gearing, &c.
A tubular BOILER, 15 ft. long, 4 ft. 9 in. diameter, with fittings, &c., complete. (Engine and boiler by Thornewall and Warham, Burton-on-Trent.)
Lead ore crusher, with counter wheel; two force pumps, with wrought from rods; metal water elsterns; double purchase crab, to lift 10 tons, and 70 fms. 2 in. rope; two ditto, to lift 4 and 6 tons; six-armed capstan, with pole and cover, and 100 fms. 4 in. rope; 90 fms. 3\(\frac{1}{2}\) in. where rope, new; 125 ft. 1\(\frac{1}{2}\) in, new block rope; drilling machine; 12 drillers and brace; lathe, with crank and lever, fly wheel, and counter shaft; 20 pitch pine pump rods, 26 ft. to 42 ft. long, and from 7 in. to 10 in. square; entire contents of blacksmith's shop; 40 tons of wagon rails; several hundred tons of metal water pipes, with flanges, in lengths of 6 ft. to 9 ft., and 7 in., 9 in., and 14 in. diameter; plunger poles, with work fig barrels, to work 7 ft. and 8 ft. strokes, &c.; the engine, boiler houses, and chimmey shafts, &c., &c.

MOLE TRAP MINE is within five minutes' walk of the Cromford Station on

MOLE TRAP MINE is within five minutes' walk of the Cromford Station on the Ambergate, Matlock, Rowsley, and Midland Junction Ratiway.

The ENGINES and PLANT will be on VIEW on the MONDAY and TUES-DAY preceding the sale.

Catalogues may be had on application to Mr. GEO. WALKER, Mine Agent. Mattock, Bath; Mulland Counties Herald Office, Birmingham; Derbyshire Times Office, Chesterfield; Sheffield Independent, Sheffield; and the Auctioneer, Marketplace, Wirksworth.

#### WESTERLEIGH, GLOUCESTERSHIRE.

VALUABLE COAL FIELDS. MESSRS. FARGUS WILL SELL, BY AUCTION, at their Sale Room, 4, Clare-street, Bristol, on Thursday, the 11th day of June, 1868, at Two & clock precisely, in One Lot, the following CLOSES of LAND, situate in the Parish of WESTERLEIGH, within the Coal Pit Heath Mineral District, within 400 yards of the Frog Laue Colliery, which is now extensively worked, viz.:—

 No. on Tithe Map.
 Names of Fields.
 Cultivation.
 Quantity.

 1054
 Lewin's Mead.
 Pasture.
 5A. 1R. 10r.

 1055
 Lewin's Mead.
 Pasture.
 7 3 28

 1057 and 1058
 Paddock.
 Arable.
 0 2 28

 1059 and 1060
 Paddock.
 Arable.
 0 1 1

Total.

Total.

Total.

Total.

Total.

Total.

The lands are held for a term of 1000 years, from the 27th June, 1839, without impeachment of waste, at a Pepper-corn rent, and are now let to the lords of the Manor of Westerleigh, as yearly tenants, at £18 per annum, under an agreement dated 23d March, 1854, by which the tenants are bound to expend £2 per annum in draining, and all timber and minerals are reserved to the owners.

This property, being situate near the centre of the Coal Pit Heath Mineral basin, most of its measures and veins of coal must underlie the same.

The three well-known seams worked at the adjacent Frog Lane Colliery range under the lands at a workable depth, the coal being of excellent quality, and commanding a ready sale.

The property is in a ring fence, and would form an excellent site for a villa residence, being midway between the Mangotsfield and Yate Station of the Bristol and Gloucester Railway.

For further particulars, apply to Mr. H. HOLLAND BURNE, solicitor, 15, Vineyards, Bath; Mr. D. H. JONES, civil engineer, Swansea; or to the Auctioneers, Bristol, at whose offices a report on the minerals underlying the property may be seen.

#### THE GARNETT AND MOSELEY GOLD MINES, IN THE STATE OF VIRGINIA,

TO BE SOLD BY AUCTION, BY ORDER OF THE LIQUIDATORS.

TO BE SOLD BY AUCTION, BY ORDER OF THE LIQUIDATORS.

MR. EILOART is instructed to SELL the above MINES, BY
AUCTION, on Tuesday, the 4th day of August, 1868, at the Auction
Mart, in the City of London, at Twelve for One o'clock precisely.

The MINES are situate in the COUNTY OF BUCKINGHAM, in the STATE
OF VIRGINIA, upon property consisting of about 1290 acres of land, and are
supposed to contain an unlimited supply of gold ore.

Reports of the mine may be seen, and particulars and conditions of sale,
when ready, may be obtained on application to Messrs. WOODROOFFE and
PLASKITT, 1, New-square, Lincoln's-inn, London; or to Mr. EILOART, No. 40,
Chancery-lane, London. In New York, further information may be obtained
on application to Messrs. Dehon, CLARK, and BRIDGES.

#### BARNSLEY VALUABLE COLLIERIES FOR SALE. PRELIMINARY ANNOUNCEMENT.

TO BE SOLD, BY PUBLIC AUCTION, towards the end of the month of July next, unless previously disposed of by private contract, when due notice will be given—

LOT 1.—All that VALUABLE COLLIERY, with the ENGINES and PLANT, called the

GAWBER HALL COLLIERY, otherwise WILLOW BANK,

ATTREES HALL COLLIERY, otherwise WILLOW BANK, and stuate on the Barnsley Branch of the Lancashire and Yorkshire Railway and the Barnsley Canal, and distant from the town of Barnsley one mile.

LOT 2.—All that other VALUABLE COLLIERY, with the ENGINES and PLANT, situate at Mapplewell, near Barnsley, and upon the said Branch Railway, and called the NORTH GAWBER COLLIERY.

The well-known Barnsley thick bed of coal is being worked by the abovenentioned pits, which are in first-rate working condition.
Further detailed particulars of the sale will be issued hereafter, and all inpromation may be obtained upon application being made to Mr. G. Armstrong,
olicitor, Newcastle-upon-Tyne; or to Mr. W. H. Peacock, solicitor, Barnsley,
Barnsley, 27th April, 1868.

TO BE SOLD,—A FIRST-CLASS NEW 14-horse power PORTABLE STEAM-ENGINE, with all recent improvements. Several GOOD SECOND-HAND PORTABLES TO BE SOLD, CHEAP. Apply to T. W. BARROWS, Engineer, Banbury.

RAILWAY WAGON WORKS, BARNSLEY

ESSRS. G. W. AND T. CRAIK

ARE PREPARED TO SUPPLY COAL AND COKE WAGONS. OF EVERY DESCRIPTION,

Either for cash, or by deferred payments through wagon-leasing companies.

WAGONS PROMPTLY REPAIRED.

LOCOMOTIVE TANK ENGINES FOR MINES AND COLLIERIES.

HENRY HUGHES AND CO., FALCON WORKS, LOUGHBOROUGH, \* Have ALWAYS in PROGRESS, and can SUPPLY at short notice,

TANK ENGINES To suit any gauge of railway and gradients from 1 in 16.

THE BEVERLEY IRON AND WAGON COMPANY

(LIMITED). ANUFACTURERS OF RAILWAY WAGONS, WHEELS AXLES, LORRYS, CARTS, WOOD WHEKLS, &c., IRONWORKS, BEVERLEY, YORKSHIRE.

BAGILLT OIL COMPANY (LIMITED), FLINT.

MANUFACTURERS OF BLACK GREASE
FOR COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £5 PER TON
TORCH AND LAMP OIL, 1s. PER GALLON (Casks free).

LUBRICATING OIL, 1s. PER GALLON (Casks free).

IMPROVED APPLICATION OF WATER POWER.

THE TURBINE.

AC ADAM BROTHERS AND CO., ENGINEERS, SOHO FOUNDRY, BELFAST, after twenty years of experience, have brought heir IMPROVED TURBINE to great perfection.
It is applicable to all practicable heights of fall, giving much greater power from the water than any other kind of water-wheel.
On low falls it has the great advantage of not being impeded by floods or ackwater.

ickwater. It is particularly well adapted for situations where the quantity of water is a riable, and where all other wheels fail. Its motion is extremely regular, and when desired, a governor can to applied

effectively. This wheel is at work in a great many places, to which reference will be given

SCHWEPPE'S MINERAL WATERS.

By Special Appointment to HER MAJESTY and H.R.H. the PRINCE OF WALES. Every bottle is protected by a label having name and trade mark.

Manufactories at London, Liverpool, Derby, Bristol, Glasgow, Malvern.

MICHOLLS, MATHEWS, AND CO., ENGINEERS,
BEDFORD IRONWORKS, TAYISTOCK.

MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made
on the BEST and NEWEST PRINCIPLES. We beg more especially to call the
attention of the public to the MANUFACTURE of our BOILERS, which have
been tested by most of our leading engineers. PUMP WORK CASTINGS of
EVERY DESCRIPTION, both of brass and iron. IIAMMERED IRON and
HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS TOOLS and RAILWAY WORK of EVERY DESCRIPTION.
ALL ORDERS FOR ABROAD RECRIVE their BEST ATTENTION.
NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying mahinery to foreign mines, and selecting experienced workmen to erect the same,
where required.

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Messrs, Nicholls, Mathews, and Co. have always a Large Stock of SECOND-HAND MINE MATERIALS in stock, and at moderate prices.

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MANUFACTURERS of STEAM PUMPING and EVERY OTHER KIND of
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of every description, of the very best quality. Estimates given for the supply of
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OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY
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Passenger carriages and wagons built, either for cash or for payment
over a period of years.
RAILWAY WAGONS FOR HIRE.

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MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for
HIRE and SALE, by immediate or deferred payments. They have also wagons
for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.

WAGON WORKS,—SMETHWICK, BIRMINGHAM.

\*\*Loans received on Debenture; particulars on application.
London Agent—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S.W.

STAFFORDSHIRE WHEEL AND AXLE COMPANY (LIMITED AND REDUCED),
MANUFACTURERS OF BAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS AND AXLES, and other IRONWORK used in the CONSTRUCTION OF BAILWAY ROLLING STOCK.
OFFICES AND WORKS,
HEATH STREET SOUTH, SPRING HILL, BIRMINGHAM.
LONDON OFFICE,—118, CANNON STREET, E.C.

NICKEL AND COBALT REFINING, AND GERMAN SILVER
WORKS, 16, OOZELL STREET NORTH, BIRMINGHAM.
STEPHEN BARKER begs to inform the Trade that he has the following articles for sale:—REFINED METALLIC NICKEL.
REFINED METALLIC BISMUTH.
OXIDE OF COBALT.

GERMAN SILVER—IN INGOTS, SHEET, WIRE, &c. NICKEL AND COBALT ORES PURCHASED.

GOLDENHILL, COBALT, NICKEL, COLOUR, BORAX AND CHEMICAL WORKS, NEAR STOKE-UPON-TRENT, STAFFORDSHIRE.

JOHN HENSHALL WILLIAMSON, MANUFACTURER AND REFINER, Purchaser of Borate of Lime and Tincal.

Teacher of Practical Mining in the late Mining School of Cornwall, and Principal of the Engineering Academy, 36, Upper Parliament street, Liverpool.

The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

of twelve months' experience in the working of these machines, by

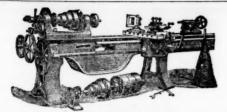
the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE. All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

SAFETY FUSE,—Messrs, WILLIAM BRUNTON AND A FETY FUSE.—Messrs, WILLIAM BRUNTON AND CO., PENHALLICK, POOL, near CAMBORRE, CORNWALL, and BRYMBO., near WREXHAM, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Aretle Expedition, and every part of the globe. For the convenience of their customers and others in the North, W. BRUNTGM and Co. have recently creeted a branch manufactory at Brymbo, near Wrexham, where, as at Cornwall, they are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE, upon warrant that it will prove equal to, if not better than, any to be procured elsewhere.

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No. 2, CROWN CHAMBERS, CROWN COURT,
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CONDUCTED BY W. T. BICKARD, F.C.S., &c.,
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Assays and analyses of every description of mineral and other satisfances manures, &c.
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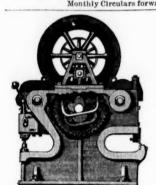
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Of every description, new and secondhand,

FOR SALE OR HIRE, prices. Best materials, workmanship, and finish, warranted WHEATLEY KIRK, At greatly reduced prices.

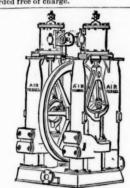
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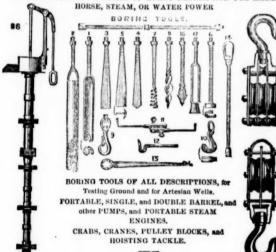


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STEAM PUMPS. From 2 to 12 in. diameter, SINGLE AND DOUBLE-ACTING. EGERTON STREET, HULME, MANCHESTER.

S. OWENS AND CO. (LATE CLINTON AND OWENS)

WRITEFRIARS STPEET, FLEET STREET, LONDON, E.C.,
HYDRAF AC AND GENERAL ENGINEERS, MANUFACTURERS OF PUMPS OF EVERY DESCRIPTION FOR HAND HORSE, STEAM, OR WATER POWER



THOMAS TURTON AND SONS,

ANY OF THE ABOVE CAN BE HAD ON HIRE

OR PURCHASE

Full information, Drawings, Price Lists, &c., re-lating to the above, and to Hydraulic Machinery of all descriptions—Crabs, Pulleys, Blocks, and Hoisting Tackle of superior manufacture—may be had on ap-



MANUFACTURERS OF CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.
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IMPROVED PATENT FLAT AND ROUND WIRE ROPES, From the very best quality of charcoal iron and steel wire.
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8HIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CON DUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPAULING, OH, SHEETS, BRATTICE CLOTHS, &c.

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MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER
and THIRTY PER CENT. CHEAPER than Russian hemp rope.
WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD
of STRENGTH.

CREASE'S NEW AND IMPROVED PNEUMATIC TUNNELLING ENGINE.

THE PROPRIETORS of this INVENTION, in order to bring its CAPABILITIES more prominently before the PUBLIC, are OPEN to TAKE CONTRACTS for DRIVING LEVELS.
Preference will be given to ADIT LEVELS and those places where ROTATORY MACHINERY is in use, and can be applied to driving the AIR COMPRESSOR.

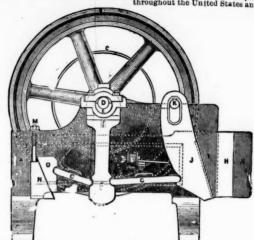
Address-E. S. CREASE, 7, Hoe-street, Plymouth.

TO MINERS, IBONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, MCADAM ROAD MAKERS, &c., &c.

OR ORE CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washee, Lake Superior, Australia, Cuba, Chill, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Moreom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.

For the Parys Mining Company,

JAMES WILLIAMS.

H. B. Marsden, Esq.

H. R. Marsden, Esq. Ecton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jave about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.

H. R. Marsden, Esq. Thos. Goldbworthy & Sons.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for se simple an article, but now think it money well spent. WILLIAM HUNT. Welsh Gold Mining Company, Dolgelly,—The stone breaker does its work ad mirably, crushing the hardest stones and quartz.

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Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 29 minutes, or fine road metal, free from dust.

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General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or \$75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Fark has just ordered a third machine for this estate.

# MARSDEN, SOHO FOUNDRY, MEADOW LANE, LEEDS, ONLY MAKER IN THE UNITED KINGDOM.

CAUTION!

BLAKE'S PATENT STONE BREAKER, In Changery.

BLAKE v. ARCHER, NOVEMBER 12, 1867.

His Honour the Vice-Chancellor Wood having found a VERDICT in FAVOUR of the PLAINTIFFS in the above Cause, establishing the VALIDITY of BLAKE'S PATENT, and made a DECREE for an INJUNCTION to RESTRAIN the DEFENDANTS, Messrs. Thomas Archer and Son, of Dunston Engine-Works, near Gateshead-on-Tyne, from INFRINGING such PATENT, and crdering them to pay to the Plaintiffs the costs of the Suit.

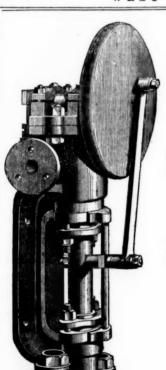
ALL PERSONS are hereby CAUTIONED against MANUFACTURING, SELLING, or USING any STONE BREAKERS similar to BLAKE'S, which have not been manufactured by the Plaintiffs. Application will forthwith be made to the Court of Chancery for INJUNCTIONS AGAINST ALL PERSONS who may be found INFRINGING BLAKE'S PATENT after this notice.

SOLE MAKER IN ENGLAND, H. R. MARSDEN, SOHO FOUNDRY, MEADOW LANE, LEEDS.

ENT FLEXIBLE TUB PATENT TUBING.

ELLIS LEVER,

GORTON WORKS, MANCHESTER



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NEAR NINE ELMS PIER AND RAILWAY STATION,

Manufacturers of Single and Twin Screw Engines for Small Tugs, Lighters, and Yachts; Steam, Hydraulic, and Hand Cranes, of every class; Steam Engines and Boilers, Improved Donkey Pumps and Injectors for feeding Boilers and other purposes, Safety Valves, Stop Valves, Blow-off Valves, and Boiler Mountings of every description.

SPECIAL ATTENTION IS CALLED TO THEIR

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Which are now univerally used by all the Leading Firms of Engineers for Land and Marine Purposes in all parts of the world. For Excellence of Workmanship and Lowness of Price they are simply unrivalled, as they are produced by Special Tools and Machinery, combined with Division of Labour, otherwise they could not be produced at the price.

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BICKFORD'S PATENT SAFETY FUSE Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IM-PERIAL EXPOSITION" held in Parls, in 1855; at the "INTERNATIONAL EXHIBITION," in Dublin, 1865; and at the "UNIVERSAL EXPOSITION,"

in Paris, 1867. TOTAL THE THE AND CO., S. MITH, AND CO., TURERS OF PATENT SAFETY-FUSE, having been into formed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:

EVERY COIL OF FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS AS THEIR TRADE MARK.

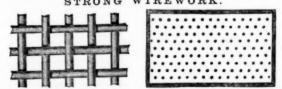
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Copies can be had at the MINING JOURNAL Office, 2s, Fleet-street, London.

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STRONG WIREWORK, the cross wires equally bent; also BEST STAMP GRATES, both of Iron and copper, and punched copper plates; DITTO TUBD. All the above promptly supplied at

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Now ready,

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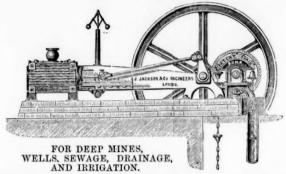
CHAIN PUMP. BASTIER'S PATENT

ABYSSINIAN EXPEDITION.—Three of these Pumps were forwarded along with the Expedition last Autumn, and various telegrams have since been received ordering others to be sent IMMEDIATELY.

The Bastier Pump is now used throughout England-sizes varying from 21 to 15 inches diameter, and up to 300 feet deep.

It is being used with great satisfaction for lifting

fluids for various purposes in Manufactories.



PUMPS WITH STEAM ENGINES, AND CATTLE. WIND, OR HAND-POWER GEAR,

Manufactured by the proprietors of the patent,

JACKSON AND

17, GRACECHURCH STREET, LONDON, E.C. PRICE LISTS ON APPLICATION.

FOR THE COUNTIES OF NORTHUMBERLAND, DURHAM, YORK, DERBY, AND NORTH STAFFORD, APPLY TO

MR. THOMAS GREENER.

MINING OFFICE, NORTHGATE, DARLINGTON.

A SMALL PUMP MAY BE SEEN AT WORK ON APPLICATION TO MESSES. J. H. GREENER AND CO., 5, JOHN STREET, ADELPHI, W.C., WHO WILL ALSO SUPPLY ANY INFORMATION REQUIRED.

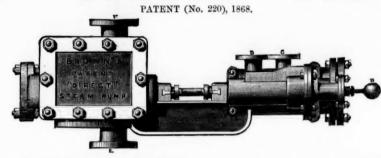
#### NEW THE

# DIRECT"

#### STEAM PUMP.

No fly wheel, Connecting Rod, Crank, or Eccentric.

No Springs Whatever.



No Valves or Spindles struck by either Piston or Piston Rod. No Tappets of any Description.

This Pump is unquestionably the simplest in construction that can possibly be made, seeing that it consists of but THREE WORKING PARTS—viz., main piston and rod with pump bucket, slide valve, and small subsidiary piston. The slide valve is moved by steam admitted at either end by means of small ports or passages in the cylinder, which are uncovered, at the extremes of the stroke, by the main piston. The practical result is that the main piston acts as a slide valve on the small or subsidiary piston, which, in its turn, causes the slide valve proper to distribute the steam upon the main piston. In this method there is no striking of any portion of the piston or rod, nor any mechanical contact whatever between the latter and the slide valve with its piston. The pump is, therefore, quite silent and at all times certain in its action.

PRICE LIST.

	WATER	PUMPS.		AIR PUMPS.								
	Diameter of double- acting barrel.	Gallons thrown per hour.	Price.		Diameter of double- acting barrel.	Cubic feet per hour compressed to a density of 30 lbs. per square inch.	Price.					
No. 14 15 16 17	3 inches 4 " 5 " 6 "	3,000 6,000 9,000 12,000	£25 35 50 75	No. 1 2 3 4	5 inches 63 ,, 7½ ,, 9 ,,	500 1000 1500 2000	£25 35 50 75					

LARGER SIZES AND OTHER PARTICULARS ON APPLICATION.

# Brown Brothers & Co., 80, Cannon-street, London, E.C.

Sole Licensees and Manufacturers of the Patent Combined STEAM and HYDRAULIC CRANE, and of the NEW INJECTOR









STEAM CRANE," 30 cwts. to 20 tons. For wharf or rail.

Contractors' Locomotive, 6 to 27-horse power. For steep inclines and quick curves.

Winding, Cooking, and Distilling.

Passed by Government for half water

TRACTION ENGINES, 6 to 27-horse power. Light and heavy. \* These cranes were selected by H.M. Commissioners to receive and send away the heavy machinery in the International Exhibition.

From the STRENGTH, SIMPLICITY, and COMPACTNESS of these ENGINES they are extensively USED for GENERAL PURPOSES, and also in situations where STEAM-ENGINES OF THE ORDINARY CONSTRUCTION CANNOT BE APPLIED.

#### ALEXANDER CHAPLIN PATENTEES AND SOLE MANUFACTURERS, CO.,

CRANSTONHILL ENGINE WORKS, GLASGOW. ENGINES OF EACH CLASS KEPT IN STOCK for SALE or HIRE, and ALL OUR MANUFACTURES GUARANTEED as to EFFICIENCY, MATERIAL, and WORKMANSHIP.

Parties are cautioned against usingor purchasing imitations or infringements of these patent manufactures.

#### PATENT. HEATON'S

# THE LANGLEY MILL STEEL & IRONWORKS COMPANY (LIMITED),

### LANGLEY MILL, NEAR NOTTINGHAM,

superior quality, by their direct process, under the superintendence of the Patentee.

The range of quality which this process secures renders the Steel and Iron suitable for almost every purpose to which these metals an be applied. Also, CAST-STEEL CASTINGS of all kinds from PATTERNS or DRAWINGS. can be applied.



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PARIS EXHIBITION, Silver Medal for STEAM CRANES. 1867-A WARDS Bronze Medal for DONKEY FEED PUMPS.

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OFFER WANTED for—
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5 Penryn Granite, £20 per share,
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References exchanged.

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9. ADAM-STREET, ADELPHI.

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#### THE MINING SHARE LIST.

#### BRITISH DIVIDEND MINES.

	Share	Mines.		Pal	a 1	ant De	Business		Potal	AL	1	Dama	The comme	Last	Finn
ч		Alderley Edge, c, Cheshi		10	0.0										
1						-					8			.April	
	200	Botallack. t. c, St. Just .	1		0		•				0			.May	
1		Brookwood, c, Buckfastle			0		•				0			. April	
1		Bronfloyd, I, Cardigan.			0			••			0			. May	
ı		Cashwell, l, Cumberland			0				0		6			.Aug.	
		Cargoll, s-l, Newlyn			7		20 22		14					.Jan.	
1		Creegbrawse and Penkey						••	2	5	0	1	5 0.	.April	1868
1	867	Cwm Erfin, l, Cardigansh	tre*	7 10	0				26	13	0	0 1	5 0.	. April	1868
1	128	Cwmystwith, I, Cardigan	shire	60 0	0				381						1867
1	280	Derwent Mines, s-l, Durh	am 3	00 0	0				174					.June	
1	1024	Devon Gt. Consols, c, Tav	istoek†	1 0			445 455		1102		0	7	0 0.	. May	1868
1	656	Ding Dong, t, Gulvalt	1	19 14										.Sept.	
1	358	Dolcoath, c, t, Camborne	15	28 17					844					.April	
1		East Caradon, c, St. Cleen		2 14		41/4	31/4 33/4				6		2 0.	July	1867
1		East Darren, I, Cardigan		32 0		-/4	078 076		158			9	0 0	May	1868
1		East Pool, t, c, Pool, Illog		24 5	0		350 375	••						May	
1		East Wheal Lovell, t, We			0	8		••							
1		Foxdale, l. Isle of Man*.		25 0			71/2 8	••	4					. May	
1								**	71					Sept.	
1		Frank Mills, I, Christow			6			••	8		6			. Feb.	
1		Gawton, c, Tavistock			6				0		0			Jan.	
1		Great Laxey, l, Isle of Ma		4 0			16% 17%		8					.Mar.	
ł		Great Wheal Vor, t, c, He		40 0	0		151/2 16							Mar.	
1		Herodsfoot, l, near Liske		8 10			371/2 40	••	45					Feb.	
1		Hingston Down, c, Calsto			6					10	0	0	5 0	.April	1866
١		Levant, c, t, St. Just		10 8				1	093	0	0	2 4	0 0	May	1868
ı	400	Lisburne, I, Cardiganshir	e !	18 15	0				507	10	0	8 1	0 0	May	1868
)	3000	Maes-y-Safn, l, Flint*	!	20 0	0		25 271/2							.April	
1		Marke Valley, c, Caradon		4 10		7			4		6			.April	
١		Minera Boundary, I, Wre		1 0			-/-		0		0			.Mar.	
1		Minera Mining Co.1, Wret		25 0		170	165 170		233					.May	
l	20000	Mining Co. of Ireland, c,	l. cl	7 0		18%				-				Jan.	
1	40000	Mwyndy Iron Orest		3 5					0	8	6	0		Mar.	
1	900	Parys Mines, c, Anglesey			0				160					Mar.	
ı	10000	Prince of Wales, t, Calsto	ock	0 12	6	21/4	41s. 43s.		0		6			May	
ł	6000	Prosper United, t, c, St. II	Harr	8 14		274	A15. 405.	••	0	6	0	0	E 0		1867
ı		Providence, t, Uny Lelant		0 6		0.00	24 26	••							
1	1120	Providence, t, Uny Leian	Torne I		7			••						Feb.	
ı	512	South Caradon, c, St. Cle	317	1 5	0		390 400		586						1868
1	6000	South Darren, I, Cardigar	1	3 6	6	**		••			6			May	
١	937	South Wh. Crofty, c, Illog	an	24 10		16	151/2 16							June	
1		So. Wh. Frances, c, Illog.		18 18			17 19	••	374					Mar.	
ı	208	Summer Hill, I, Mold		3 13					2		6				1868
1	6000	Tincroft, c, t, Pool, Illoga	nt		0	14/2	131/2 141/2		19	11	0	0			1868
ı	2000	Trumpet Cons., t, Helston	1	11 10	0	12			12	10	0	0 1	0	Mar.	1868
1	3000	W. Chiverton, l, Perranga	buloct	10 0	0	641/2	61 63		27	7	6	2 (	0	May	1868
١	5000	West Godolphin, t, c, Brea	ge	0 1	0				0	2	0	0 5	2 0	Dec.	1867
ı	400	W. Wheal Seton, c, Cambe	ornet 4	47 10	0	205	195 205		494		0	5 (	0	April	1868
ł		Wheal Basset, c, Illogant		5 2	6		621/2 671/2				0			June	
ı		Wheal Friendship, c, Tav		20 0		-	-//-							Nov.	
ì		Wheal Jane, s-l, Kea		10 10					-					Jan.	
l		Wheal Kitty, t, St. Agnes		5 4		234	21/2 23/4		8	7	0	0			1868
ı	1094	Wheal Mary Ann, I, Menh	eniote	8 0	0		22 23	:.	64	5	0	0.1	7 6		1868
ı		Wheal Owles, t, St. Just;			0		40							Feb.	
1		Wheal Seton, t, c, Cambor		8 10			80 85	••						Feb.	
I		Whitewell Lead, Clithero		0 5			30 00		1						
ĺ						199/		••						Dec.	
1	17000	Wicklow, c, i, Wicklow	*****	2 10	0	13%		••	48	10	0.0	0	D U.	.April	1909

	FOREIGN DIVIDEND M	INI	S.
35000	Alamillos, I, Spain*1 2 0 0 2 13/4 2		0 2 6 0 1 6 Mar. 1868
20000	Australian, c. South Australiat 7 7 6		0 1 0 0 1 0 Aug. 1867
15000	Cape Copper Mining* 7 0 0 12% 13 131/4		3 2 6 0 10 0. Feb. 4868
	Don Pedro North del Rey 12 0 14 0 2% 23/4 2%		0 17 3 0 1 6 June 1868
	English and Australian, ct 2 10 0 %		0 1 0. Feb. 1868
	Fortuna, I, Spain*† 2 0 0 2 1% 2		
	Gen.MiningAssoc., NovaScotiat 20 0 0		23 10 0 0 15 0 June 1867
	Gonnesa, 1,* [5000 £5 pd., 5000 £4 pd.]		10 per cent July 1867
	Kapunda Mining Co., Austratt 1 0 0	••	0 1 4 0 0 G., May 1868
	Linares, t, Spain*t 3 0 0 216 2 216		11 11 8 0 3 4. Mar. 1868
	Panulcillo, c, Chili* 3 0 0 214 134 214		10 per cent Yearly.
	Peel River Land and Mineral* 100 0 0		
	Pontgibaud, s-l, Francet 20 0 0		5 6 2 0 11 11, May 1868
	Port Phillip, g, Clunest 1 0 0 158 11/2 13/4		1 1 0 0 I 0 May 1868
	Scottish Australian Min. Co.t. 1 0 0 36 14		8 per cent May 1868
	St. John del Rey, Brazil* 15 0 0 1814 181/2 19		81 10 0 4 5 0 Dec. 1867
	Vancouver, cl*+1 6 0 0 5		10 per cent May 1868
	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]		0 90 0 10Jan. 1866
	West Canada Mining Co.* 1 0 0		0 19 6 0 2 6 May 1866
	war man mannau		

## NON-DIVIDEND FOREIGN MINES,

Shares	Mines.	Paid.	La	st Pr. Bus. dor	ie. Last	Call.	ı
50000	Anglo-Argentine, s, Argentine Republic*	1 0					ı
	Anglo-Brazilian, g*t	0 10 (		78 · · 9/8 7/4	Nov.	1866	ı
	Anglo-Italian, g*t	0 10 (			Jan.	1868	ı
20000	Australian United, g	1 0 0			Mar.	1868	
	Burra Burra, c, South Australia	5 0 0					1
	Capula, s, Moxico*†	1 14 6			May	1868	
	Chontales, g, s, Nicaragua*†	5 0 0		2 134 2	Mar.	1868	ı
	Cobre Copper Company, c, Cubatt*	45 10 (			Jan.	1868	ı
10000	Copiapo Mining Company, Chilif:	16 10 (			••		ı
10000	Copiano Smelting, Chili	10 0 0			April	1866	ı
300	Copper Miners' Co. of South Australia * [150 £100 pd.,	150 £7	0 pd	.]	Nov.	1866	
15000	El Chico Silver Mining and Reduction Company*	5 0 0			Nov.	1866	ı
40000	Fortune Copper Mining Co. of Western Australia				Fully	pd.	1
50000	Frontino and Bolivia, g. New Granada*†	1 17 6		34148. 158	April	1868	ı
10000	Great Barrier Land, Mining, &c., New Zealand	5 0 0			Fully	pd.	ı
80000	Great Northern, c, South Australiat	1 11 (			Sept.	1862	ı
7927	Lusitanian (Portugal) †						ı
83640	Mariquita, g, s, New Granada	1 0 0			Feb.	1868	ı
12500	Nerbudda Coal and Iron, India*†	6 0 0			Dec.	1867	1
\$1000	New Quebrada, c, Venezuela*†	3 10 (					ı
15000	Otea, c, New Zealand*				Fully	pd.	i.
80000	Pestarena United, g, Italy*†	2 15 (		23/8 23/8 23/8			Ĺ
10178	Rhenish Consolidated, [6000 £5 pd., 4178 £2 10s. pd.]	-			May	1866	Ĺ
00000	Rossa Grande, g. Brazil*†	0 14 0		1 % 1	June	1867	11
15000	San Pedro del Monte, s, Mexico*				Sept.	1866	
10000	San Roque, I, Spain	5 0 0			Fully	pd.	ı
00000	Taquaril, g. Brazil*				Oct.	1867	
6000	Terreseu, s-l, Isle of Sardinia						į.
43174	United Mexican, s, Mexicoti*	28 7 6			May	1868	
30000	Val Antigoria, g, Italy*			34 1			L
6000	Val Sassam, s, c, l, Italy**				Aug.		
45000	Victor Emanuel, c, Italy*				Fully		
20000	Washoe, q. Nevadat				Fully		1
80000	Worthing, c. South Australia*	1 0 0		1/2 3/8 1/2	Fully		1
75000	Yorke Peninsula, South Australia			% · · 1/8 1/8	Fully		1
45000	Yudanamutana, c, South Australia 12	3 0 0		21/813/4 17/8	Fully	pd.	ĺ
						1	i

#### NON-DIVIDEND MINES.

NON-DIVIDEND M	IMES.	6000 South wheat Grenville, t, c 1 3 0
Shares, Mines,	Paid. Last Pr. Bus. done. Last Call.	400 So. Wh. Seton, c, Camborne 81 3 0
914 Caradon Consols c, St. Cleer	02 10 0 —	242 Spearne Moor, t, St. Just 6 2 0 —
1000 Carn Brea, c, t, Illogan;	30 0 0 21 18 20June 1868	673 St. Ives Wh. Allen, t, St. Ives 18 18 7
5000 Carnaryonshire, I, Carnaryon*	4 0 0 Fully pd.	675 St. Ives Wh. Allen, t, St. Ives 18 18 7 —
3000 Chiverton, 7, Perranzabuloe	10 5 0 1%1% 21%June 1868	8771 St. Just Amalg., t,* [6000 £3 10s. pd., 2771 £2 5s. pd.
3000 Chiverton Moor, l, Perranzabuloe	6 8 6 6¼6% 6% Aug. 1867	
age curvered moor, t, refranzabuloe	00 17 0 Ell 8 Ell Tuno 1007	
2880 Clifford Amalgamated, c, Gwennap!	33 17 6 51/2 5 51/2 June 1867	
2450 Cook's Kitchen, c, Illogan!	19 14 9 11101/103/4July 1866	
12800 Drake Walls, t, Calstockt	2 5 0 ½ % Dec. 1866	501 Tresavean and Trethurrup 16 11 0
512 East Basset, c, Redruth	34 10 0 8 9 10 Mar. 1868	4440 Trevenen & Tremenheere 7 11 0 —
2000 Fast Com Dags a Deducth	3 18 0 38 1 April 1868	
6000 East Carn Brea, c, Redruth!		
6000 East Grenville, c, Camborne		
4000 East Wheal Russell, c, Tavistockt	13 2 6April 1868	
6144 Gonamena, c, St. Cleer	7 6 9 April 1868	1319 West Cwm Erfin, l* [319 £5 paid]
5000 Great North Downs, c, Redruth	6 13 0 4378 418 Feb. 1867	256 West Damsel, c, Gwennap 38 10 0 19 17 19
4800 Great Retallack, s-l, b, Perranzabuloe	2 13 6 23/821/8 23/8 April 1868	
step Great Retailack, 8-t, 0, Ferranzabilio		
5143 Great South Tolgus, c, Redrath		
1798 Great Wheal Fortune, t, Breage	31 7 4 Mar. 1868	
400 New Wheal Seton, c, Camborne	60 10 0 April 1868	
3457 North Downs, c, Redruth	5 8 10. 1%1% 1%Jan. 1868	4096 W.Wh.Tremayne, c, St.Erth 0 6 0
695 North Roskear, c, Camborne		741 Wheal Basset and Grylls, t., 7 18 6 —
8000 North Russhanter C. Cambonine Sessessions	1 9 0 18s 18s. 20s Dec. 1860	6000 Wheal Crebor, c, Tavistock. 2 6 6
5936 North Treskerby, c, St. Agnes	9 11 9 01/ 17/ 01/ Inly 1000	
5610 North Wheal Crofty, c, Illogant	3 11 3 21/21% 21/8 July 1866	6000 Wheal Ida, s-l, St. Ive 1 5 6
3000 North Wheal Chiverton, I, Perranzabuloe	4 0 0Mar. 1867	
5000 Old Westminster, l, Denbigh	2 0 0 June 1867	
8465 Pedn-an-drea, t, Redruth	6 8 6 Nov. 1867	896 Wh. Margaret, t. Uny Le. t. 13 17 6. 6 . 51/2 6
1024 Rose and Chiverton United, I, Newlyn		728 Wheal Margery, St. Ives, t, c 27 4 0
and the distriction of the days of the day		
6138 South Condurrow, t, c, Camborne		
940 St. Ives Consols, t, St. Ivest		
920 Stray Fark, c, t, Cambornet	45 5 8 21/2 2 21/4 April 1868	
6000 Tamar Valley, s-l, Beeralston	0 76 Feb. 1868	
548 Trelyon Consols, t, St. Ives	16 0 0 4 31/4 4 Dec. 1866	6000 Wheal St. Vincent, s 0 1 0 2
6000 West Basset, c, Illogantt		1920 Wh. Trannack, c, Sithney. 1 13 3
1004 West Class Co. Ct. Classes		
1024 West Caradon, c, St. Cleertt		
12800 West Drake Walls, c, Calstock		
2582 West Great Work, t, Breage	5 11 0 June 1866	
6000 West St. Ives, t, c, St. Ives	0 2 6 16 98. 11s May 1868	4
512 West Wheal Frances, t, Illogan	106 15 0 3530 3216	
5000 West Wheal Kitty, t, St. Agnes	3 2 0 April 1868	MISCELLANEOUS.
soon Wheel American Blooms		MISCELLIANEOUS.
6000 Wheal Agar, c, Illogan		60000 Anglo-American Telegrh.*† 10 0 0 221/221/2
512 Wheal Buller, c, Redruth t		10000 Auglo-American Telegril. 10 0 0 22/422/1
811 Wheal Emily Henrietta, c, Illogan	20 0 0 40371/2 40Jan. 1868	10000 Arklow Chemical Works, l. 1 0 0 —
5724 Wheal Grenville, c, Cambornet	10 6 0 36s11/2 15/6 Mar. 1868	30000 Central American Associ.*† 1 10 0
1040 Wheal Trelawny, s-l, Liskeardt	7 19 0 - 9 10 Mar. 1868	8 80000 Ebbw Vale Iron Co.*† 27 0 0
5000 Wheal Uny, t, c, Redruth	10 14 6 214 2 21/4 Oct. 1867	148525 London Gen. Omnibus*† 4 0 0 2 21/4
BOOK HANDER CALLS AS AS MENTAL HAND STATE OF STREET	10 72 0 11 2/4 11 2/6 11	1 11 - 1 11 11 - 1 11
h blende : el coal : e conner:	a gold . 7 lead . s. wilver: al., glate: se	d, silver-lead : t, tin : z, zinc.

#### NON-DIVIDEND MINES.

	NON-DIVIDEND MINES. Shares. Mines. Paid. Last Pr.	Bus. done
	2562 Abraham Cons., t, e, Crowan 1 7 0 —	••
id.	4000 Bedford Consols, c, Taylstock 2 15 0 — 4000 Bedford United, c, Taylst.* 2 10 8 —	11/4 11/4
868 866	1031 Bedol Aur, t, Holywell 1 17 0 —	
868 868	2500 Bosworthen and Penzance 4 0 0 —	:
866 868	1200 Bryn Gwyn, l, Mold* 9 0 0	:
368 368	1000 Budnick Consols, c	:
867 867		.12s. 13s.
368 367	1000 Camborne Consols, c 18 10 0	pd.]
368 367		:
368 368	4005 Cardigan Consols* 5 0 0	
68 67	20000 Carysfort [3200 £2½ pd., 16800 £1½ pd.] . 2500 Central Minera, l, Wrexham* 3 17 6 — .	: . /
366 368	3000 Chiverton Valley, l. Perranz. 2 0 0 5	- 416 K IS
368 368		. 3
68	983 Copper Hill, c, Redruth 12 10 0	
68	1000 Cornwall Hematite Co.* 5 0 0 —	. 6 61/2
68 68	6000 Cuddra, t, St. Austell 5 5 0	
66	740 Eaglebrook, t, Talybont* 19 15 0 —	:
68	1000 East Basset and Grylls, t 3 5 0 — . 6000 East Bottle Hill, t 0 11 0 — .	
68	1000 East Basset and Grylls, t	
67 68	6000 East Laxey, l, Isle of Man 2 15 0 — . 6000 East Neptune, c, Marazion — — .	
68	5000 E. Rosewarne, c, t, Gwinear 2 17 0 — . 6000 East Snaefell, I, I. of Man* 2 10 0 — .	
68	1190 E. Wh. Agar, c, St. Cleer 12 17 0	
68 68	5000 E. Wh. Rose Con., l, Per.* 2 10 0 — . 6000 Ebury Lead Min. Co., Flint* 1 15 0 — .	
68	6000 Fortescue Consc, Taylstock 0 12 6	:
68	1026 Garden, c, Morvan	:
68	6000 Fortescue Cons., c, Tavistock 0 12 6. — 940 Fowey Con., c, Tywardreath; 5 4 6. — 1026 Garden, c, Morvah	. 6s. 7s.
68	6000 Gothic, s-l, Cardigan* 2 10 0 —	:
68 68	486 Grambler & St. Aubyn, c t 74 0 0 — 10000 Great Cwmsymlog, s-t* 1 15 0 —	:
68	5000 Great Mona I Iule of Mans 4 0 0	
68		
	1000 Great N. Tolgus, c, Illogan 10 0 0 — 15000 Great Rhosesmor, l 5 0 0 —	
368 367	1000 Great N. Tolgus, c, Illogan. 10 0 0, — 15000 Great Rhosesmor, l. 5 0 0, — 15000 Great Rhosesmor, l. 5 0 0, — 3313 Gt. Wh. Baddern, t, Devoran 7 17 6, — 119 Great Work, t, Germoe . 100 0 0, — 10240 Gunnislake (Ciltters'), t, c, 4 19 0, — 6685 Gwydyr Park J. Llanywe	
368 368	119 Great Work, t, Germoe 100 0 0 10240 Gunnislake (Clitters'), t, c 4 19 0 6068 Gwydyr Park, t, Llanrwst 1 14 6	
368 368	6490 Harwood I Durham* 0 7.6 -	
67	1019 Leeds and St. Aubyn, t, c 19 13 4	
868	5120 Lovell Consols, Wendron, t. 0 4 0	
368	6000 Mid-Wales, s-l,*	2% 3%
68	1924 Nangiles, t, t, Rea 30 12 0 —	
67	12009 Nether freatra [5]00 & ph., 6400 28, ph.] 6000 New Birch Tor & Vittler, [2. 1 1 8 6 1500 New Chiverton, I, Perranz 0 9 6. 148, 6000 New Clifford, c, Gwennap*. 2 15 0 24000 New Cornish [12000 & ph.] 6400 N. Crow Hill J & St Stophen 2 5 5 ph.]	
66	6000 New Clifford, c., Gwennap*. 2 15 0 — 24000 New Cornish [12000 £1 pd., 12000 [5s, pd.]	
00	6514 New E. Russell, c. Taylstock 0 12 6.	
u.	20000 New Gt. Cons., c, Taylstock 0 17 6 — 3000 New Huntingdon, t, Devon 0 10 . —	
66	3000 New Huntingdon, t, Devon. 0 1 0 . —	
68 68	667 New Trevenen, t, Wendron, 12 1 6	
68	2000 N. Wh. Towan, c, t, Wendron 1 10 0 — 5000 No. Dolcoath, c, Camborne 4 3 0 —	
68 68	1361 No. Grambler, c, Redruth 8 17 3 — 6000 North Jane, t, s-l, Konwyn 3 1 6 —	
66	2000 North Levant, t, c, St. Just 10 12 0 10 4000 No. Phœnix, c, Linkinhorne 4 11 0 —	9% 10
66	3933 North Pool, c, Illogan 5 16 0 — 1024 No. Retallack, c, Perrazabuloe 2 0 0 —	
d. 68	1935 No. Shepherds, l, Newlyn* 6 10 0 — 6000 North Wheal Basset, c, tt 5 0 0 —	
d. 62	6144 N.W. Robert, c, Smp. Spincy 4 8 11. — 12288 Okel Tor, c, Calstock 2 7 4 —	
68	8000 Old Gunnislake.c. Calstock 2 15 0 — 6400 Par Consols, c, St. Blazeytt 2 14 6 —	
67	5000 Pendeen Consols, c, St. Just. 7 1 0 4000 Penhale United, s-l, Perran. 1 15 0	
d.	5000 Penhalls, t, St. Agnes 3 0 0 —	
66	1772 Polberro, t, St. Agnes 15 0 0 —	49, 68,
66 d.	3000 Rhydtalog, s-1, Cardigan 0 5 0	
68	6000 Roaring Water, c*	
67		
d.	20500 Snaefell, I, Isle of Man* 1 0 0 —	
d.	512 South Basset, c, Gwennap 30 10 0	
d.		
=	3000 So. Fowey, c, Tywardreath. 0 15 0. —	34 1
	2739 South Trevenna, $c, t, \dots, 2$ 10 0 — 6000 South Wheal Grenville, $t, c, 1$ 3 0 —	
11. 67	400 So. Wh. Seton, c, Camborne 81 3 0	-
68	242 Spearne Moor, t, St. Just 6 2 0 — 673 St. Ives Wh. Allen, t, St. Ives 18 18 7 —	
68 67	8771 St. Just Amalg., t,* [6000 £3 10s. pd., 2771 £300 Steeple Aston Iron Ore Co 7 0 0 —	2 5s. pd.
67 66	6000 South Wheal Grenville, t, c 1 3 0	
66 68	501 Tresavean and Trethurrup. 16 11 0 — 4440 Trevenen & Tremenheere 7 11 0 —	111
68	1943 Treworlis, t. Wendron 11 15 4	
68	4200 Vigra and Clogau, c, Dolg. *‡., 5 10 0— 1319 West Cwm Erfin, i* [319 £5 paid] 256 West Damsel, c, Gwennap 38 10 0 19	
68		98, 11s.
68 68	1000 West Rose Down, c, Linking. 20 17 6 —	
68 68	4096 W.Wh.Tremayne, c, St.Erth 0 6 0 —	
68 60 66	41 Wheal Baset and Oylis, 6. 7 18 6. —	
66 67 67	6000 Wheal Ida, s-l, St. Ive	
67 67 68	896 Wh. Margaret, t, Uny Le. 1. 13 17 6. 6 728 Wheal Margery, St. Ives, t, c 27 4 0	51/2 6
68	6000 Wheal Mary Florence, c*	3/4 1
68 68	anno Wheal Pose a Securior 0 20 0	
66	1920 Wh. Trannack, c, Sithney. 1 13 3	2
68	1200 Wheal Trevenna, t, c* 10 0 0	
66	-	
68	MISCELLANEOUS.	
67 68		.221/4221/4

 $b, \, \mathrm{blende} \, ; \, \mathit{cl}, \, \mathrm{coal} \, ; \, \mathit{c}, \, \mathrm{copper} ; \, \mathit{g}, \, \mathrm{gold} \, ; \, \mathit{l}, \, \mathrm{lead} \, ; \, \mathit{s}, \, \mathrm{wilver} \, ; \, \mathit{sl}, \, \mathrm{slate} \, ; \, \mathit{s+l}, \, \mathrm{silver-lead} \, ; \, \mathit{l}, \, \mathrm{tin} \, ; \, \mathit{z}, \, \mathrm{zinc.}$ 

\*. Companies marked thus \* have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exchange, those marked thus ‡ have paid Dividends.

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